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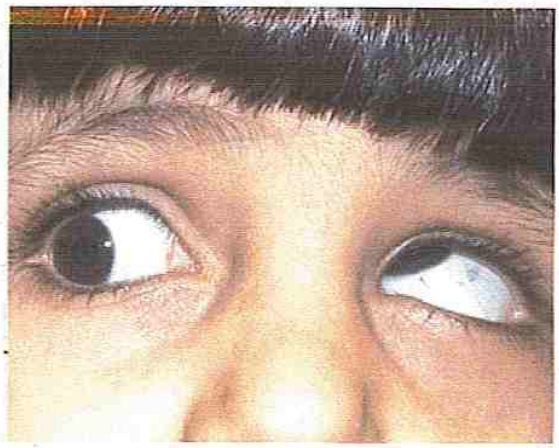

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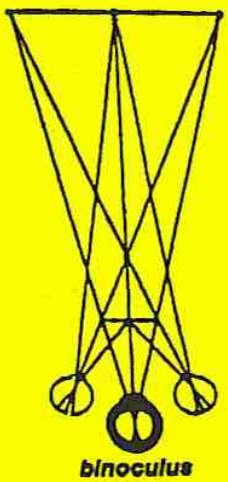

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BINOCULAR VISION & Strabismus Quarterly e-Periodical 2008, VOLUME 23, NUMBER 3 PAGES 129-192

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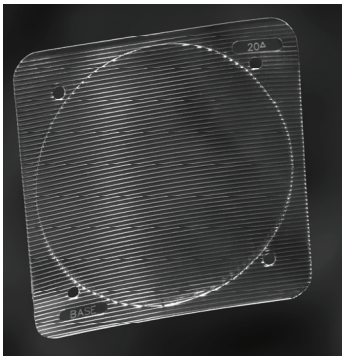

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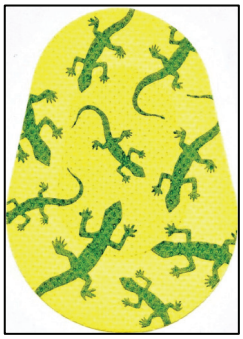

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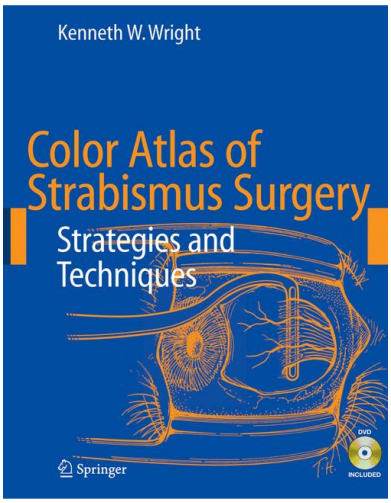

Kenneth W. Wright, USC Keck School of Medicine, Los Angeles, CA, USA

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BINOCULAR VISION & Strabismus Quarterly

"... the belief that one's view of reality is the only reality is the most dangerous of all delusions ..."
-Watzlawick, 1976

EDITOR **ISSN 1088-6281** **ThirdQuarter of 2008**
Paul E. Romano, M.D., M.S.O **TABLE OF CONTENTS** **Volume 23, Number 3 p.137**
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***** ORIGINAL SCIENTIFIC ARTICLES *****

***** CASE REPORT *****

BINOCULAR VISION & Strabismus Quarterly: INSTRUCTIONS FOR AUTHORS

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1. Jones AB, Jones CD, Jones EF, et al: Results of Laser Surgery for Strabismus. J Outst Surg l999; 2:301-304.
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* Statistical Analysis of Results Mandatory. But give "exact" probability values (i.e., p = .06). Do not use relative p values (i.e.,p >< .05). The term "statistically significant", defined traditionally as a $p \leq .05$, is a totally arbitrary and unscientific term and should not be used (J Lab Clin Med 1988. 111:501). But DO consider whether your results may be "clinically/medically significant".

D. BRIAN STIDHAM MEMORIAL LECTURESHIP

LECTURE to be published annually in *Binocular Vision and Strabismus Quarterly*

Donations Solicited to Fund Lectureship

To the Editor:

The Pediatric Ophthalmology community lost a great doctor last October 6, 2005, with the death by murder of D. Brian Stidham.

I am attempting to create an endowed lectureship to remember Brian in our community and within pediatric ophthalmology, and wonder if I could ask you to consider helping in this regard. I know that your journal concentrates on strabismus and binocular vision, but could I interest you in publishing the "Stidham Lecture in Pediatric Ophthalmology and Strabismus" that will hopefully be given on a yearly basis? I would work with the presenter to make certain that a manuscript would be produced that would be of acceptable quality. Having a target journal for the presentation would be a great carrot to draw top speakers to Tucson on a yearly basis to give such a talk.

We have raised $14,000 towards a target of $50,000 endowment that would ensure that the lecture would be perpetuated. I am committed to continue fundraising until the goal is met. If *Binocular Vision and Strabismus Quarterly* would serve as the publisher of the named lecture, I feel certain we will be able to both attract top speakers and donors to remember Brian in the years ahead, and to provide a great lectureship in pediatric ophthalmology and strabismus to our professional community which would enjoy greater readership and distribution.

Joseph M. Miller, M.D., MPH
Head, Ophthalmology and Vision Science
University of Arizona, Tucson, Arizona

In reply:

We are honored to be asked and will most definitely be pleased to publish this lecture each year. **We would encourage our readership to donate to this fund: Checks should be made payable to The University of Arizona Foundation with memo of "Stidham Endowment" and sent to Dr. Miller at U AZ, Ophthalmology, 655 N. Alvernon Way, Ste 108, Tucson AZ 85711. - PER**

ADVICE for authors submitting papers to Binocular Vision & Strabismus Quarterly©

1. READ & FOLLOW INSTRUCTIONS FOR AUTHORS! In addition:
2. READ & FOLLOW INSTRUCTIONS FOR AUTHORS! In addition:

Reviewing the literature: A proper review of the literature starts with a review of current and appropriate textbooks, especially the latest edition (currently the Sixth of von Noorden's Binocular Vision and Ocular Motility by Mosby, and Duane's loose-leaf text Clinical Ophthalmology. Anticipating a future requirement, it will only be to your credit now to specifically state what was included in your literature search, i.e., the topics or subjects and the sites searched. For any article submitted here that should include at a minimum, Index Medicus (Medline) from 1966 to the present, Index Bnoculus Primus, 1985 to the present, and the Internet for the American Orthoptic Journal.

Acceptable TERMINOLOGY	not acceptable
AHP Abnormal Head Postures:3	
face turn	head turn
chin up/down	head up/down
Head tilt	
retroequatorial myopexy	Fadenoperation
retroequatorial myopexy	posterior fixation suture
suspension-recession	hang back, hang loose
Bielschowsky Head Tilt Test	three step test
strabolog-y, ist	Strabismolog'y, ist
exact p values	"Statistically significant"

Re: "lost to followup" - Avoid this at all costs; First it raises the possibility that the patient had a (=) bad result or was otherwise so unhappy with their care that they never came back - or went elsewhere or went nowhere out of fear or dissatisfaction. If they are "lost followup" you cannot refute the possiblity that one those very unhapy thingsppened! Second it is inexcusable - medico-legally. Third: It reflects poorly on you as both a health care professional and as a scientist and Fourth: under the worse of circumstances suggests or indicates that you may discriminate against those of lower socio-economic status (research findings).

WRITING STYLE IS IMPORTANT TOO:
(from Investor's Business Daily Nov. 26, 1997 by M. Stettner)
"Make Dry Data Come Alive in Your Reports ... tips on making your technical writing come alive:
1. Remember that less is more. ... simplify your language and prune extra words. Eliminate jargon, and keep your sentences and paragraphs short. 'If you write in little bites, you break down lots of information for the readers so that it's easier to absorb,' said Carolyn Mulford, president of The Writing Coach.
2. White in the active voice. ... For example, write 'When you review the data, you will note these trends'. Avoid saying 'These trends were noted upon a review of the data.' Another example: Write 'We will examine', not, 'This has been examined'. ...
3. Insert 'talking subheads'. ... unbroken text can intimidate any reader, ... organize your writing in sections with each carrying an easy to understand subhead ... a talking subhead ... alerts the reader of what you're about to discuss ... for instance, instead of heading a section with 'Cost of Scanners' try 'Rising Cost of the Next Generation of Scanners'. subheads should average 7 words.
4. Run a test. ... ask someone in your audience group to read your manuscript.
TABLES: Don't forget the crowding phenomenon. It works in Tables too. We prefer spaces to lines to separate the items in a Table. You can also get more material within whatever size limits you may have, using spaces instead of lines, especially vertical lines. Horizontal lines are less of a sin. -PER 22(4)

Binocular Vision &
Strabismus Quarterly©
A Medical Scientific e-Periodical

Editorial:
P. E. Romano, MD, MS Ophthalmology

Third Quarter of 2008
Volume 23 (No.3):
Page 140-142

EDITORIAL: Monitors and Civility, Followups Nystagmus from Guitar Hero! Pediatric Cataracts: Review; Monocular Elevation Deficiency Strabismus.

In the past year, we have in these editorial pages proselytized for bigger and better computer monitors (*BV&SQ* 22(3):145 Q3,2008 and *BV&SQ* 23(1):22 Q1,2008. Here's some hard data to back those recommendations up. Prices continue to drop on monitors, so you don't have to postpone buying a couple of big monitors, one for your home and one for your office. I have bought three big used 4x3 ones on ebay and love them all! (From *The Wall Street Journal.*)

The last two issues of *BV&SQ* we have also in these pages bemoaned the loss of civility in our society. Here's yet another example (next page, from *Time* July 21,2008).

In THIS ISSUE

Brown S. Protracted Micro-Nystagmus Induced by Video Game Play in a Patient with Mild Ocular Albinism. *Binocul Vis Strabismus Q* 2008; 23:143-144. A truly remarkable case. The full time obsession with video-gaming is mind boggling and scarey.

VanderVeen DK. Cataract Update 2008: All You Need to Know About Your Pediatric Cataract Patients. The D. Brian Stidham, M.D. Memorial Lecture 2008. *Binocul Vis Strabismus Q* 2008; 23:145-148.

This was intended for an audence primarily of pediatricians but it is an excellent general current review of thesubject

Khan A. O. Monocular Elevation Deficiency

B8 *Tuesday, March 25, 2008*

BUSINESS TECHNOLOGY

BEST OF THE BUSINESS TECH BLOG

Excerpts from Recent Entries at WSJ.com's Tech Blog

Do You Need to Work Faster? Get a Bigger Computer Monitor

BY BEN WORTHEN

Working late? Blame your computer screen. A new study finds that bigger monitors make people more productive.

Researchers at the University of Utah tested how quickly people performed tasks such as editing a document and copying numbers between spreadsheets while using different computer configurations: one with an 18-inch monitor, one with a 24-inch monitor and one with two 20-inch monitors. Their finding: People using the 24-inch screen completed the tasks 52% faster than people who used the 18-inch monitor; people who used the two 20-inch monitors were 44% faster than those with the 18-inch screens.

The study concluded that someone using a larger monitor could save 2.5 hours a day. But James Anderson, the professor in charge of the study, said to take that result with a grain of salt: It assumes that someone will work nonstop for eight hours, which no one will, and that the tasks they perform will benefit from a larger screen, which isn't always the case. Still, tasks such as moving data between files are ideally suited to bigger or multiple screens. Mr. Anderson, who uses a computer with two 20-inch screens and one 24-inch screen, recommends that businesses take the time to match employees with the proper screen size based on job requirements.

A caveat: The study was funded by NEC Corp., which makes computer monitors.

Binocular Vision &
Strabismus Quarterly©
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Editorial:
P. E. Romano, MD, MS Ophthalmology

Third Quarter of 2008
Volume 23 (No.3):
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Nerd World | Lev Grossman

Post Apocalypse

The Web needs commenters. But are they ruining the Net faster than they can save it

Commenters respond with surprise when people call them on being not nice. In their social universe, this kind of rhetorical slap-fighting is just how you do business

ROSE IS ROSE/ by Pat Brady & Don Wimmer

Binocular Vision &
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Editorial:
P. E. Romano, MD, MS Ophthalmology

Third Quarter of 2008
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with Contralateral Superior Oblique Muscle Tendon Laxity. *Binocul Vis Strabismus Q* 2008; 23:159–163.This paper handles not just the diagnosis but also the management of this challenging strabismus problem,

We missed this last AAPOS meeting in Washington, D.C. **If you made a presentation there, PLEASE CONSIDER SUBMITTING IT FOR CONSIDERATION FOR PUBLICATION HERE IN *BV&SQ directly IF IT IS A POSTER THAT IS NOT MANDATORY FOR SUBMISSION TO THE JAAPOS -OR IF A FORMAL PRESENTATION, IF IT IS NOT ACCEPTED ON SUBMISSION TO THE JAAPOS. WE WILL CONSIDER NON-STRABOLOGY PEDIATRIC OPHTHALMOLOGY PAPERS AS WELL.(note cataract paper)***

Don't miss the Abstracts or Hyde Park editorial - We leave you with two observations about the electoral process. One (right->)would predict Obama will easily beat McCain even though his words are empty and his inability to argue and debate with that magnificent oratorical voice are legion. The second (below) is why I prefer not voting at all to serving any more jury duty than I have to. -Happy Halloween -Ed.

-

Talk Is Cheap In Politics, But A Deep Voice Helps

* * *

Vocal Experts Measure Candidates' Likability; Toting Up 'Ums' and 'Ahs'

By JUNE KRONHOLZ

Impressive biographies, fine policy positions. But do the candidates *sound* presidential?

Their vocal cords—as much as the substance of their words—could influence who becomes the next president, claim the people who study, measure, "focus-group" and coach the human voice.

"Voice matters—it's what sells," says John Daly, a University of Texas communications professor who has written a book about persuasion. University of California at Los Angeles psychology professor Albert Mehrabian even claims to have quantified how important a voice is. When we are deciding whether we like the person delivering a message, tone of voice accounts for 38% of our opinion, body language for 55% and the actual words for just 7%, his studies sug-

Susan Miller

Life-Changing Event Every single presidential candidate is promising that he or she will make our lives better if we elect him or her to the White House. He or she will give us change, offer us hope, make our breath sweeter, make us more prosperous, more productive, happier, better educated, holier and healthier if we cast our vote for him or her.

Presidents simply cannot change much for most of us. For the huge majority of Americans, how much we earn, how healthy we are, how well our kids are educated, that's all up to us, not the federal government. No government program will make us middle class or rich if we don't get educated in some way and work hard. No government program will make us healthy if we eat too much or smoke or drink too much, or don't get exercise. The government cannot provide a lavish retirement for us if we don't save and invest well. Oh, and all that money the candidates promise to spend? That's your money, not their money, they're spending.

In a free society, what we are and who we are depends on us, except for the very most poor among us, where the government can indeed make a difference. But for the huge bulk of us Americans, no matter what any Republican or any Democrat promises, it's up to the people in our house, not the White House. For most of us, what the politicians say is just sideshow barking, and when the circus leaves town we've got to get back to basics: work, save and teach your children well, and enjoy the political show. But it's just show business, not real business.

—BEN STEIN, *CBS News: Sunday Morning*

22 FORBES MAY 19, 2008

Binocular Vision &
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Protracted Micro-Nystagmus Induced by Video Game Play
In a Patient with Mild Ocular Albinism
Sandra Brown, MD

Third Quarter of 2008
Volume 22 (No.3):
Pages 143-144

Case Report

Protracted Micro-Nystagmus Induced by Video Game Play in a Patient with Mild Ocular Albinism

SANDRA BROWN, M.D.

from the Cabarrus Eye Center, 201 LePhilip Ct NE,Concord, North Carolina 28025. Fax: 704-782-1148. Email: sbrownmd@cabarruseye.com

CASE REPORT

A 22 year-old healthy white male with no known ocular history was referred by a local optometrist with a one-week complaint of constant eye twitching, blurred vision and a feeling of spatial disorientation. A few days before symptom onset, the patient's girlfriend purchased the Sony PlayStation 2 video game Guitar Hero III: Legends of Rock as a gift, and the patient either played the game or watched other playing it extensively for 3 to 4 consecutive days, for 2 to 3 hour sessions or "maybe more". The patient had versions I and II of the same game and had experienced the same symptoms after prolonged play, resolving in less than 1 hour. The optometrist noted micronystagmus, pale optic discs, iris transillumination defects and Krukenberg spindles in both eyes.

On examination, visual acuity was 20/20 in each eye; Titmus stereopsis was 4/9 dots; color vision using the Ishihara plates was normal in each eye. There was no manifest or latest strabismus on cover testing in primary position at distance or near. In primary position, there was horizontal, pendular, small amplitude, low velocity nystagmus which increased in left gaze and decreased in right gaze; smooth pursuits were very jerky in all directions. Slit lamp examination showed light blue irises with numerous peripheral large transillumination defects and Krukenberg spindles in each eye. On dilated fundus examination, there was minimal grainy macular pigment without a well-defined foveal light reflex, and no choroidal pigmentation in the peripheral fundus; the optic discs had central cups of approximately 0.4 in each eye, with temporal rim pallor. An optical coherence tomography of the optic discs showed borderline-normal rim thickness. A 24 degree visual field was normal in each eye. The patient was advised to avoid all video games and not to spend too much time on the computer.

On return visit one week later, the patient reported his symptoms had resolved. He had not played video games whatsoever in the interim. His uncorrected visual acuity was 20/16 in each eye; Titmus stereopsis was 5/9 dots. Smooth pursuit was still jerky, but there was no visible nystagmus. He recalled that he had a maternal female cousin with "white hair" who was "legally blind"; a later conversation with the patient's aunt confirmed the diagnosis of albinism. The clinical findings and family history supported a diagnosis of mild ocular albinism, manifested as lack of choroidal pigmentation, mild optic disc hypoplasia, and mild reduction of stereopsis (expected to be 40 arc seconds given the visual acuity). The patient coincidentally was found to have pigment dispersion syndrome, and probably had iris transillumination defects from both diseases.

The packaging for Guitar Hero III

(ActiVision Publishing, Inc) lists as a side effect of play "eye or muscle twitches" and advises that a 15 minute break should be taken for each one hour of play. Video game play is known to alter spatial resolution, and nystagmus can develop in normal individuals as a conditioned response to environmental movement. Albino patients without nystagmus have been shown to have saccadic instability and inaccuracy. I hypothesize that individuals with the binocular vision abnormalities characteristic of albinism may be susceptible to prolonged induced nystagmus after excessive play of Guitar Hero III, which involves continuous rapid saccadic eye movements in all directions. My young (male) patients tell me that this game is wildly popular.

Although not a revolutionary discovery, this case report does provide an unusual clinical insight into the cortical integration and positional stability defects that are the essential features of ocular albinism, even in its mildest form. Given the prevalence of (undiagnosed) albinism and the current popularity of this video game, perhaps other cases will be identified and reported.

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Cataract Update 2008:

All You Need to Know About Your Pediatric Cataract Patients

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Cataract is one of the most common treatable causes of visual disability in children (1). The reported incidence of infantile cataracts ranges from 1 to 13 per 10,000 live births (1-3), and children may acquire cataracts for a variety of reasons at any time during the developmental years. Diagnosing and managing cataracts in the early years can be challenging, but improvements in surgical instrumentation, techniques, and use of intraocular lenses have allowed improved outcomes.

The role of the pediatrician is important in early detection and referral for cataract patients, but also in supporting the family through the process of visual rehabilitation that takes place after the cataract is diagnosed and treatment initiated. Herein is a review of topics that may be useful for a pediatrician in understanding the issues involved in the care of their pediatric cataract patients. The following areas will be addressed:

Why do infants and children develop cataracts?

How can the pediatrician detect this problem and make a timely referral?

What are the current treatment strategies?

What are the expected outcomes?

To review why cataracts develop in children, it is important to consider fetal development of the eye and lens structures (4). The

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lens begins developing in the second month of gestation, and the tunica vasculosa lentis is the vascular network that nourishes the fetal lens and regresses prior to birth. Abnormalities in development of the lens capsule or fibers, or remnants of the fetal vasculature account for some of the infantile cataracts. Additionally, transparency of the lens depends on a critical biophysical balance between proteins and water in a regular array of cells. Any insult that disrupts this balance can cause an opacity in the lens and potentially impact vision. One useful way to classify cataracts is descriptive, by the location of the opacity within the lens (2,4,5). Examples include anterior and posterior capsular or subcapsular cataracts, as well as various central (nuclear or cortical) cataracts.

In children, unfocused visual input to the brain lead to deprivational amblyopia, and permanent loss of vision in children with cataracts is usually the result of irreversible or untreated amblyopia. In terms of cataract and visual development, there are two key periods to consider:

A ***critica*l** period, where intervention must occur in the setting of a visually significant lens opacity to avoid irreversible deprivation amblyopia, and

A ***sensitive*** period, where loss or gain of vision can continue to occur in the setting of cataract or after treatment for cataract.

The length of these developmental periods have been estimated by numerous studies reporting outcomes after treatment(6-22), and ideally surgery is performed at least prior to 4 months of age for infants with bilateral congenital cataracts, and 2 months of age for unilateral cataracts. Early detection and intervention for these infants is therefore critical for a good outcome. Cases that are detected later, however, can show improvement in vision, so intervention should not be withheld. Especially for unilateral cases, or for children with strabismus or secondary opacities, amblyopia treatment must continue for several years. The greatest impact on visual development, whether positive or negative, occurs in the early months and years, as vision has usually stabilized by age 8 years.

Etiologies of cataracts can also be sorted by whether they are bilateral or unilateral. For bilateral cases, cataracts are most commonly either idiopathic, or familial and dominantly inherited (5). Numerous syndromes and chromosomal abnormalities have been associated with cataracts, as well as metabolic disorders, infections, or treatments such as radiation or corticosteroid administration. Ocular abnormalities may also be associated with development of cataracts, whether bilateral or unilateral (Figure 1).

Figure 1 (Next Page) *(VanderVeen): Examples of bilateral cataracts in a) top,left: CHARGE syndrome, b) top,right:Bardet Biedl syndrome, c) left middle:steroid induced posterior subcapsular cataract, d) right middle:Leber's Congenital Amaurosis, and unilateral cataracts in e) bottom left:persistent fetal vasculature (PFV). Note the variety of types of lens opacities and variable changes in the red reflex.*

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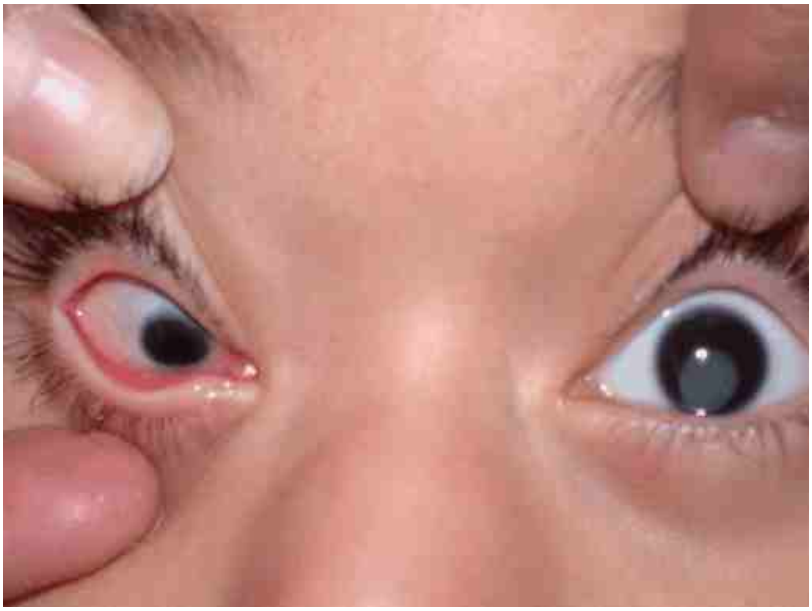

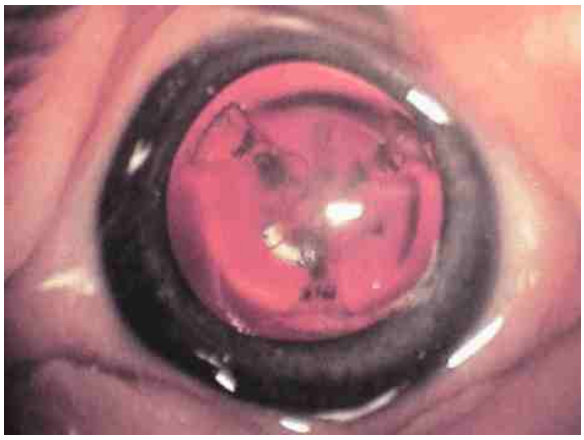

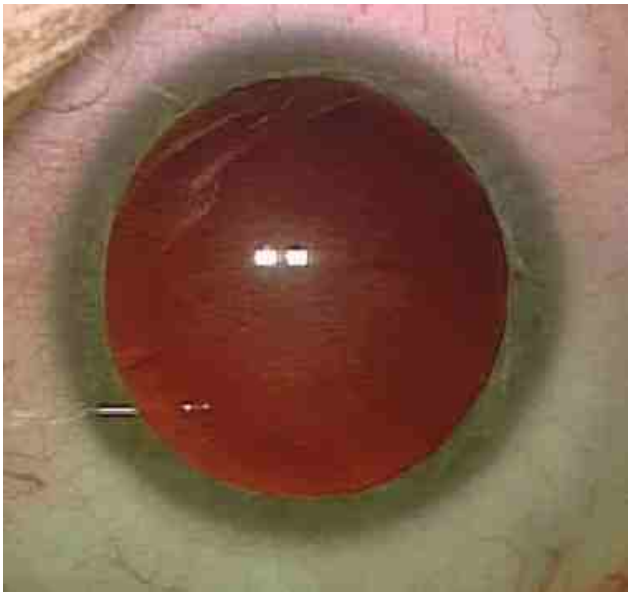

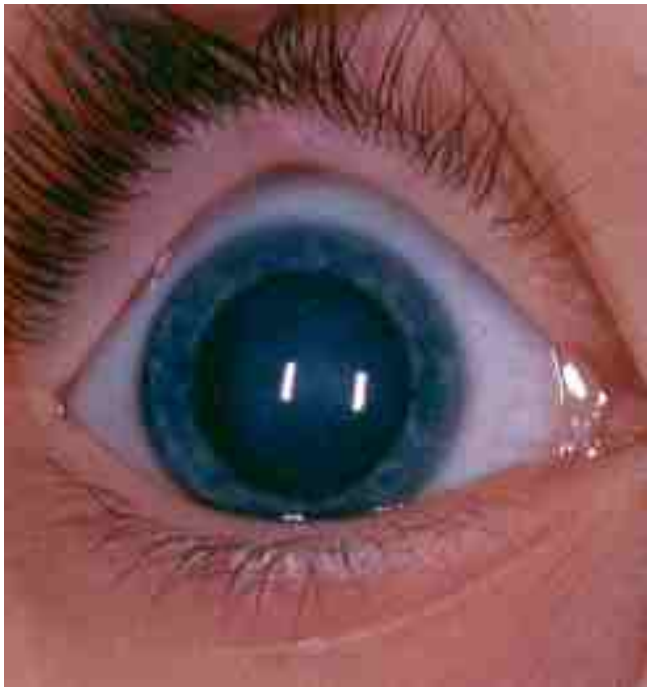

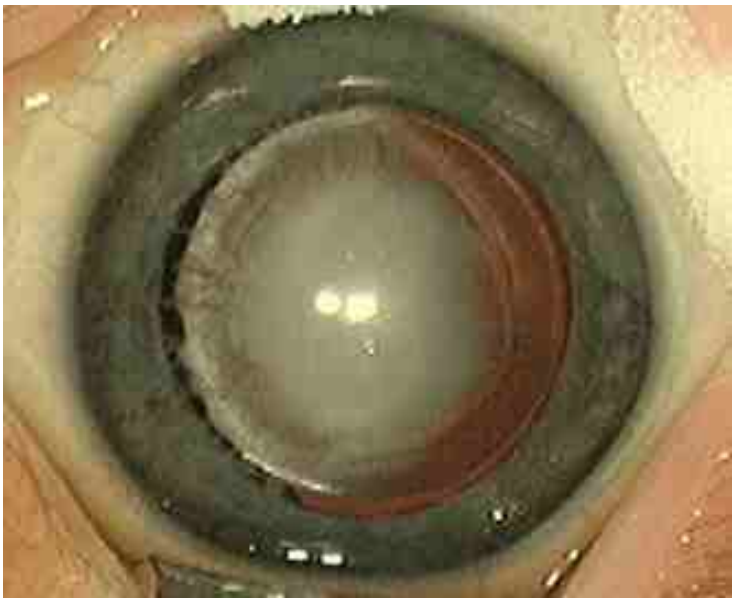

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In a recent review for our institution (23), we found that of the 173 patients who were operated on in a 5 year period, almost 2/3 were bilateral, and similar to other reports, the majority of cataracts were familial, non-familial without an associated syndrome or abnormality, or in patients with an identified systemic or ocular syndrome or abnormality **(see Table below**). Unilateral cases were predominantly due to a developmental anomaly of the lens (posterior lentiglobus or PFV), or trauma.

Rarely are congenital cataracts due to infectious causes, and while this table reflects relatively high proportion of patients with radiation induced cataracts , these were usually in older patients, as there has been a trend for lower rates of cataract formation with higher fractionation and lower doses of radiation used in more recent years.

Table: Etiology and Distribution of Pediatric Cataracts

Cause	Number of Patients
Familial	31
Non-familial, bilateral	37
with associated syndrome/abnormality*	13
Idiopathic, unilateral	27
With associated syndrome/abnormality**	3
Radiation therapy	22
Trauma	18
Posterior lenticonus	10
Persistent Fetal Vasculature	6
Uveitis	4
Diabetes	2

*includes Down's syndrome (3), Deafness (2), Leber's Congenital Amaurosis (2), CHARGE association (2), Kabuki syndrome (1), Lowe syndrome (1), uncategorized developmental delay (1), optic atrophy (1)
** Down's syndrome (1), non-traumatic retinal detachment (2)

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Once the cataract has been diagnosed, further testing by either the ophthalmologist or the pediatrician may be indicated. In all cases, a thorough physical exam by the pediatrician and a thorough ocular exam by the ophthalmologist should be performed. History of previous illnesses, treatments, and ocular conditions should be reviewed, and family history questioned for eye diseases in childhood. If there are any usual findings on physical exam, especially in bilateral cases with no family history of childhood cataracts, further testing may be warranted. This may include laboratory testing, CXR, or referral to a geneticist. Ophthalmology testing may include examinations under anesthesia or ultrasonography, as well as special tests of visual function or visual potential. For cases that are identified as familial with an isolated ocular abnormality or unilateral, further testing is probably not warranted.

Many sporadic cases of bilateral cataracts may be associated with gene mutations that have not yet been identified, and genetic testing is not routinely performed. A new collaborative effort, the National Ophthalmic Disease Genotyping Network (eyeGENE), is underway to provide testing for many ophthalmic genetic diseases. This includes testing for several retinal diseases, including retinoblastoma, anterior segment dysgenesis syndromes and corneal dystrophies, glaucoma, and optic atrophy. However, no testing for cataracts is commercially available. Extensive research has been done to find the genetic and molecular basis for cataract formation. Gene mutations causing congenital or juvenile cataracts have been identified on chromosomes 1-3, 6, and 8-22 (24). Mutations in genes coding for major lens proteins (α, β, and γ crystallins, water soluble proteins that play a critical role in lens clarity), connexins (act as intercellular bridges and are important for transmembrane transport and thus lens clarity), and developmental regulator genes have been described (25-27).

How can the pediatrician help in the detection and treatment of patients with cataracts? A joint statement (28) by the American Academy of Pediatrics, American Association of Certified Orthoptists, American Association for Pediatric Ophthalmology and Strabismus, and American Academy of Ophthalmology recommends that:

> The pediatrician monitors ocular health at birth and throughout childhood to detect and prevent vision loss, and that PCP screening is the most effective approach to accomplish early detection of ocular problems in children.
>
> The basics of detecting ocular problems in children involves, beginning in the nursery and at each well child check, an evaluation of:
>
> - The red reflex
> - Visual behavior and/or visual acuity testing
> - Abnormal alignment (strabismus) or eye movements (nystagmus)

All parental concerns should be addressed, and suspicious findings should prompt referral to an ophthalmologist qualified to care for infants and children.

Cataracts may be detected by the examining pediatrician in the newborn nursery, using the direct ophthalmoscope to look for the red reflex, and exams at the early well-child visits should also include identification of a bright red reflex. Virtually any visually significant cataract can be recognized as a shadow against the red reflex with

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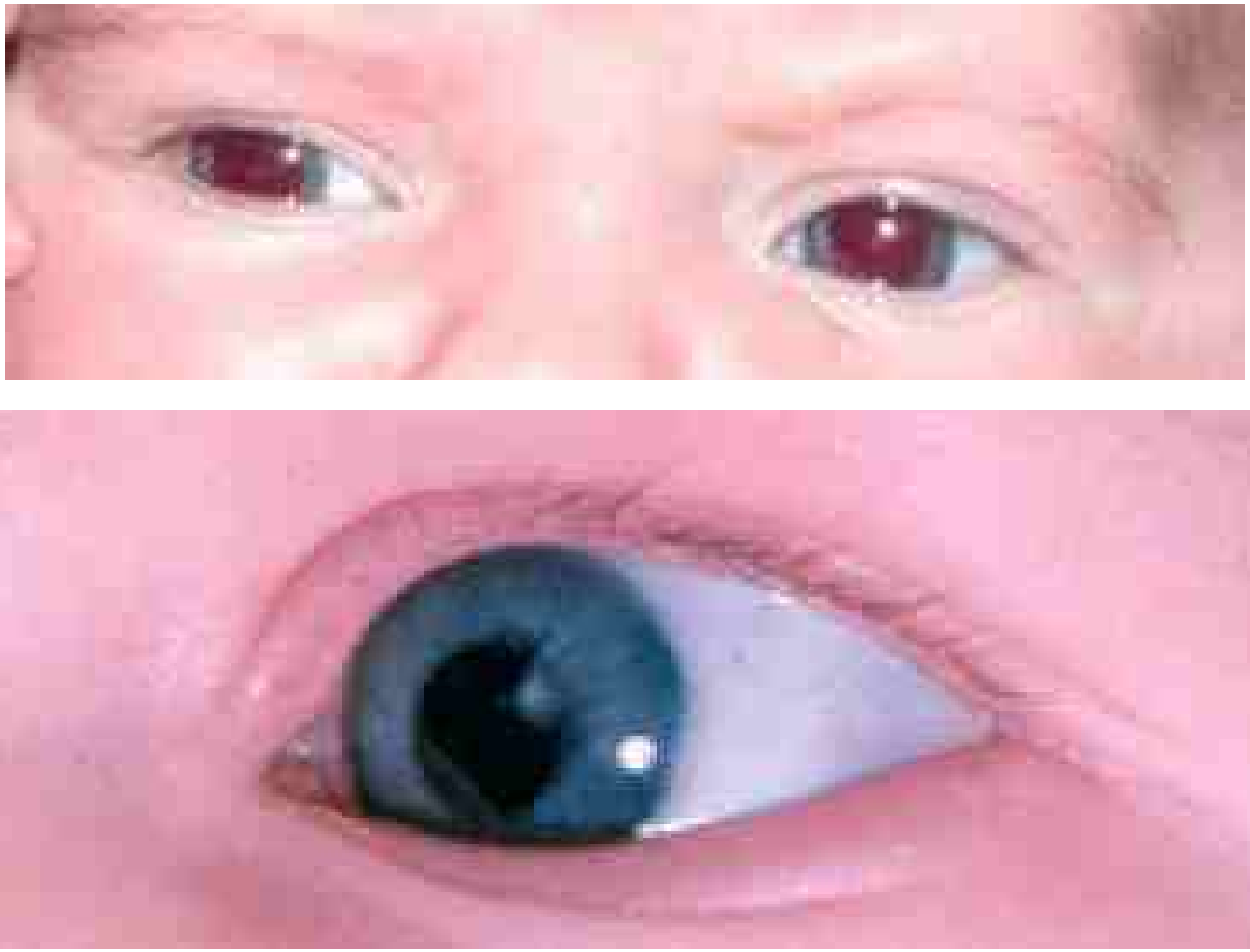

Figure 2 *(VanderVeen):*

Newborns with a) (above top): small bilateral lens opacities and b) (above bottom): unilateral anterior lens opacity with iris-lens adhesion.

the direct ophthalmoscope, and occasionally subtle opacities can be detected this way as well. Any diminished red reflex should be referred to an ophthalmologist, and especially for infants the ferral should be arranged within a reasonably short time. Tips to aid in the exam include dimming the room lights, and lower the intensity of the light on the ophthalmoscope so as to look for a red reflex with minimal constriction of the pupil. Any other unusual characteristics about the eye or child may also warrant a referral. Changes in the cataract, progressing from an essentially normal red reflex to a white pupil, have occurred as quickly as 2 weeks, so that documentation of a normal red reflex is important is establishing onset and progression.

Occasionally parents are the first to identify the cataract, especially in the case of the "white spot in the pupil". Even if small lens opacities are seen (**see Figure 2 above**), referral is useful to look for associated abnormalities. Despite the benign appearance, over one quarter of patients with

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anterior polar cataracts develop amblyopia, usually due to anisometropia (29). Additionally some subtypes of anterior opacities, such as anterior pyramidal or anterior subcapsular cataracts, are more likely to progress and require surgical intervention (30). Some patients are referred for what appears to be an isolated or small lens opacity, but are found to have other ocular anomalies ranging from high refractive error to posterior findings such as retinal folds or optic nerve anomalies.

Parents may also report that their child "just doesn't track well". Infants with normal health and neurologic status should show good fixation and be able to follow by 3-4 months of age, so questionable visual responses should prompt a referral (31,32). When the exam reveals a poor red reflex, the urgency of referral increases, since there is a critical period of visual development for dense or central congenital cataracts referral and intervention should ideally take place by 2-4 months of age. Direct communication with the ophthalmologist or confirmation of an appointment is optimal, since families may not understand the importance of timely intervention or be able to navigate the appointment systems. In the setting of congenital cataracts, abnormalities such as poor visual behavior, nystagmus, or strabismus (in unilateral cases) are a late sign, and deprivation amblyopia is already present.

Another consideration is when to refer siblings of patients with familial or non-familial but bilateral cataracts. Extra effort to view a clear red reflex should occur in the nursery, but even with a normal exam a referral for a baseline ophthalmologic exam may be prudent. Even within families in which the gene mutation has been identified, differences in phenotypic expression, both in appearance of the cataract and timing of onset are known to occur (27).

Strabismus may be the presenting sign of a cataract **(See Figure 3 below)**. Ocular alignment usually stabilizes or normalizes in infants by 6 months of age (33). Referral patterns vary regionally, but persistent strabismus at 6 months of age should prompt a referral, and in the absence of a good red reflex or other anomaly, referral should occur sooner. Development of strabismus is often a late sign and is indicative of and responsible for amblyopia in many cases (34-36). Review of family photos can be useful, as the red reflex can be tracked over time and give some estimate of timing of onset and progression, and therefore prognosis.

Figure 3 *(VanderVeen): Infant with left esotropia induced by cataract (note the comparatively diminished (darker) fundus red reflex in left eye).*

While visual behavior can be estimated in the young child by fixation behavior pattern and visual tracking, eventually (usually by age 3 or 4 years) the visual acuity can be measured as part of routine pediatric screening. Detection of poor or

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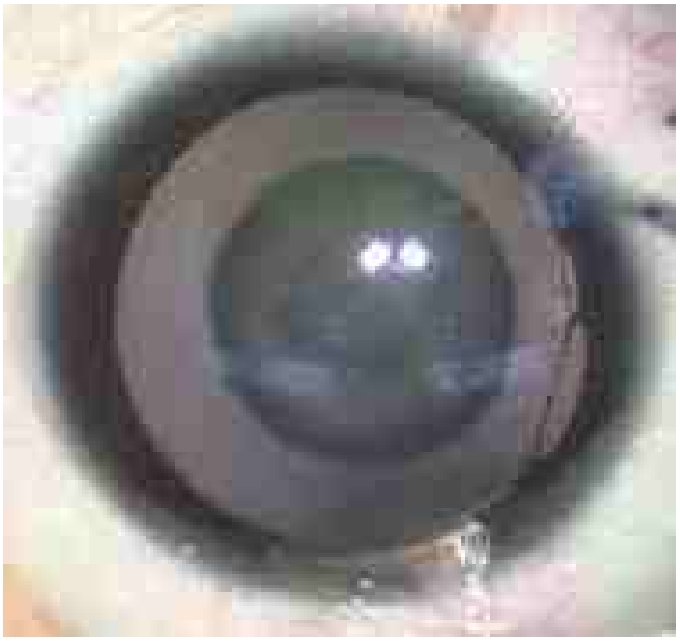
asymmetric vision scores should prompt referral, and the red reflex should be checked **(see Figure 4, below)**. Some cataracts typically appear in the pre-school or early elementary years, and not all failed vision screenings are due to refractive error. Once detected, the period of visual recovery for acquired cataracts often matches the period of visual deprivation, so that cataracts of acute onset that receive surgery often regain normal vision quickly, while those eyes that have had significant opacities for months or years may take a similar period to recover vision. Unfortunately in the case of unilateral opacities, often the deprivation amblyopia cannot be completely overcome.

Figure 4 *(VanderVeen): 5 year old with failed vision screening; note lack of a good fundus red reflex bilaterally produced by central lens opacity seen in the second lower frame.*



Once a referral to the ophthalmologist is made, a careful evaluation of the significance of the opacity is made. Small or partial opacities may not require surgical intervention, and surgery may often be deferred until it is clear that the cataract will have significant visual impact (16,37). The view through the cataract may provide an estimate of the visual acuity measure, and this may be compared to expected measures for the child's age. While a partial cataract may produce slight blurring of images, lens extraction requires some form of optical correction to establish a clear retinal image, and amblyopia may still result in the setting of uncorrected aphakia or undercorrected pseudophakia (Figure 5). Loss of accommodation after lens extraction must be weighed against visual implications of small lens opacities in young patients. Small or partial opacities, therefore, may be managed with patching, dilation, or spectacle correction, and close observation. If it becomes clear that visual function is compromised or amblyopia is present despite compliance with treatment, then surgery should be performed.

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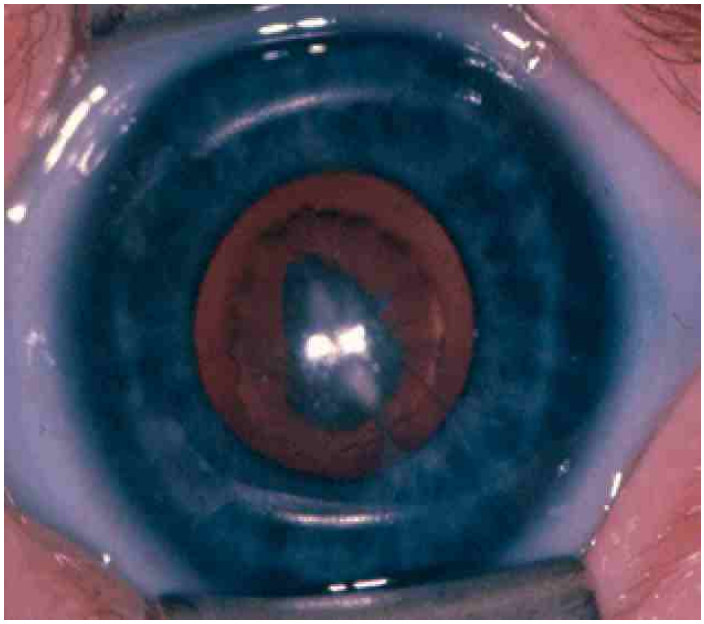
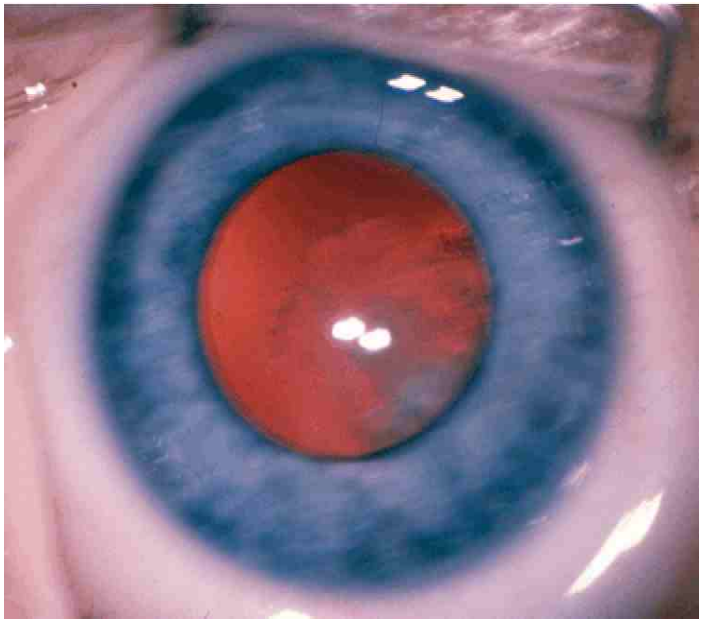
Figure 5 *(VanderVeen): Patient with bilateral congenital cataracts: a) right eye was operated on at 5 weeks of age, but poor compliance with amblyopia therapy resulted in dense amblyopia (1/400 vision); b) partial cataract not operated on until age 6 years resulted in final vision of 20/30.*





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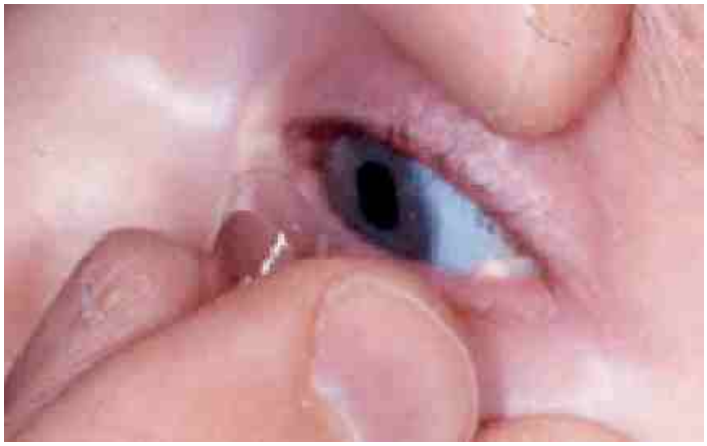
If vision cannot be measured, certain characteristics observed by the ophthalmologist are known to contribute to visual impairment and risk of permanent deprivation amblyopia. These include central opacities of 3mm or greater, posterior lens opacities, inability to visualize the retinal details through the cataract, and a poor retinoscopic reflex through the central lens. The presence of strabismus, nystagmus, and myopic shifts or axial elongation of the eye are also known to occur with deprivation amblyopia. All factors should be considered in the decision making process for treatment.

Once a cataract has been determined to be visually significant and warranting surgery, consideration of how to re-establish focus of the eye must occur. The child's eye grows significantly in the first 2 years of life, especially in the early months, and any method used to focus the eye must take this into account. The method used must correct high degrees of hyperopia, allow for the changing refractive status of the eye, provide a clear visual image, be minimally irritating and have a low complication rate. Each of the primary methods available, contact lenses, spectacles, or an artificial intraocular lens (IOL), have advantages and disadvantages (34-36).

Figure 6 *(VanderVeen): Correction of aphakia with contact lens (below) vs. IOL (next page)*



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Intraocular Lens (IOL) replaces cataractous lens.

The primary advantage of the contact lens is the ability to easily make adjustments in power as the eye grows, but requires daily maintenance and some patients develop an intolerance or become difficult to manage. Aphakic spectacles provide a more limited peripheral view, but for some are more comfortable and are useful for bilateral cases. Both contact lenses and spectacles, however, have the disadvantage of the child being able to remove them.

IOLs have been used more and more frequently in children, and are tolerated well in the pediatric eye. Most pediatric ophthalmologists agree that children over 18-24 months are good candidates for IOL placement, and most pediatric cataract surgeons implant a foldable acrylic monofocal lens. For young patients in whom significant ocular growth is expected, adjustments in IOL selection and spectacle overcorrection are made to maintain the focus of the eye, as there is no intent to replace the IOL in most cases. Use of IOLs in infants is controversial. The advantage is partly practical, in that the eye is always mostly in focus and the child cannot remove it, while the primary disadvantage may be requirement of reoperations for secondary opacities. Children over 5 years of age have completed most ocular growth so choice of IOL power is less problematic, and complications few. IOL implantation is generally avoided in cases of microphthalmia, uveitis, and glaucoma. No IOL has been FDA approved for use in pediatric patients.

When surgery is performed, a bimanual technique using vitrectomy instrumentation is most commonly used. Small incisions are used, and sutures are required but are absorbable. After surgery, for successful visual rehabilitation, the visual axis must remain clear and the focus of the eye must be maintained. Amblyopia treatment is necessary for unilateral cases, and is commonly also required in bilateral cases. While patching therapy is the preferred treatment, some patients can be treated with an occluder contact lens. Patching about 50% of waking hours is often prescribed for unilateral infant cases, and a few hours per day may suffice for older children or as maintenance treatment. Whether an IOL with spectacles or a contact lens is used, the child is given the best focus for near vision during the first 2 years, and after that a bifocal overcorrection is prescribed.

Outcomes after cataract surgery are highly dependent on the timing of cataract formation, discovery, treatment, and then detection and treatment of associated amblyopia. For most patients, compliance to treatment is the key to good vision and not the method of re-establishing the focus of the eye (contact lens vs. spectacles vs. IOL). Only a few types of cataracts are associated with other ocular anomalies that might preclude

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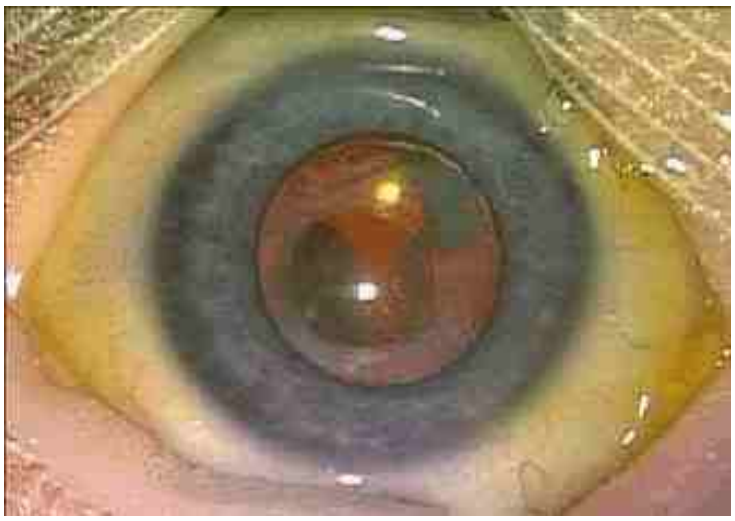
good vision. In general, acquired cataracts have the best outcome, because the child had a period of normal visual development that was transiently interrupted by the cataract formation. Patients with bilateral cataracts, whether infantile or acquired, generally have good vision when early intervention is accomplished(13-21). Most (about 80%) patients with bilateral infantile cataracts achieve 20/50 or better vision and many have binocularity. The presence of nystagmus indicates a poorer prognosis, with final acuities usually less <20/100.

Monocular infantile cataracts have proven to be a difficult problem, because of the strong dominance of the normal eye. The best prognosis is with intervention by 6-8 weeks of age and good compliance to amblyopia therapy(8-13). With later intervention or poor compliance with therapy, vision is usually quite poor (<20/200), and almost all patients have strabismus and lack binocular vision. In a meta-analysis of 5 large series, only 20% achieved 20/40 or better, and almost 50% were 20/200 or worse(11). Because of the poor visual outcomes for unilateral congenital cataracts, a multi-center randomized clinical trial, the Infant Aphakia Treatment Study, is underway to compare the correction of unilateral aphakia with an IOL versus a contact lens for infants under 7 months of age at the time of cataract surgery. Secondary outcomes include comparisons of parental stress, complication rates, and strabismus.

Serious complications after cataract surgery, such as endophthalmitis or retinal detachment, are rare, especially in older children(40-50). Young children do have an exaggerated inflammatory response, and more commonly develop secondary membranes, reproliferation of lens material, and opacification of the posterior lens capsule when this is not removed primarily. Infants who have surgery in the early months are at greater risk of developing glaucoma, and aphakic glaucoma has been reported in up to 32%. Ocular anomalies such as microcornea or microphthalmia appear to contribute to other complications such as glaucoma or retinal detachment, as does early surgery. Re-proliferation of lens material that blocks vision and requires surgical intervention occurs in 10-15% of aphakic infant eyes, but occurs in 85% of infant eyes with IOL placement (**Figure 7**). The highest complication rates after surgery are reported in infants with IOL placement in the first month of life. Overall, amblyopia is by far the greatest cause of a poor visual outcome.

***Figure** 7 (VanderVeen): Reproliferation of lens material limiting vision in an infant eye with an IOL.*



For children who have had early surgery and are contact lens or aphakic spectacle wearers, secondary IOL placement surgery(51) is taking place more commonly. This provides significant improvement in visual function and daily activities. A secondary IOL can be placed at any time that contact lens or spectacle wear becomes difficult,

but since most of the ocular growth and change in refractive status has occurred by the age of 5 or 6 years, this is a time that parents often consider proceeding with surgery.

Various multifocal or "pseudo-accommodative" IOLs are being used in adults, and have been used in a few children(52). Some are commercially available with a surcharge to the patient, and some are available through clinical trials. None are being used regularly in children, mostly because of issues surrounding the growing pediatric eye and the need for proper centration or pupil size for clear vision, which is especially important in the amblyogenic ages. Further research is being done to allow removal of the cataract with maintenance of accommodation.

In summary, children develop cataracts for a variety of reasons, with genetic influences or ocular dysmorphology being the predominant associations. Early detection and timely referral allows successful treatment, with generally excellent outcomes. Amblyopia remains the most common cause of visual loss and requires constant monitoring throughout childhood.

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Monocular Elevation Deficiency With Contralateral
Superior Oblique Muscle Tendon Laxity
Arif O. Khan, MD

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Original Scientific Article

Monocular Elevation Deficiency with Contralateral Superior Oblique Muscle Tendon Laxity

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ABSTRACT: ***Introduction***: Monocular elevation deficiency with a tight ipsilateral inferior rectus muscle and fixation preference for the contralateral eye is a well recognized entity in strabismus. Most descriptions of the condition, however, do not document oblique muscle forced duction testing in the contralateral eye. The purpose of this report is to raise awareness that monocular elevation deficiency can be associated with (and may be secondary to) a floppy (lax) superior oblique muscle tendon in the contralateral fixating eye.

Methods: Retrospective case series.

Results: All 4 patients were previously diagnosed with congenital monocular elevation deficiency. All had variable head tilt towards the hypotropic eye, pseudoptosis with mild elevation limitation in that eye, and bilateral fundus excyclotorsion. In addition to inferior rectus muscle restriction in the hypotropic eye, forced duction testing was significant for contralateral superior oblique muscle tenon laxity.

Conclusions: Fixation preference for the eye with lax superior oblique muscle tendon may have led to a tight inferior rectus muscle in the non-preferred eye; however, a congenital association between tight inferior rectus muscle and a lax superior oblique muscle tendon in the other eye cannot be ruled out. Patients diagnosed with monocular elevation deficiency should have careful attention to forced duction testing of the contralateral superior oblique muscle tendon.

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Monocular Elevation Deficiency With Contralateral
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INTRODUCTION:

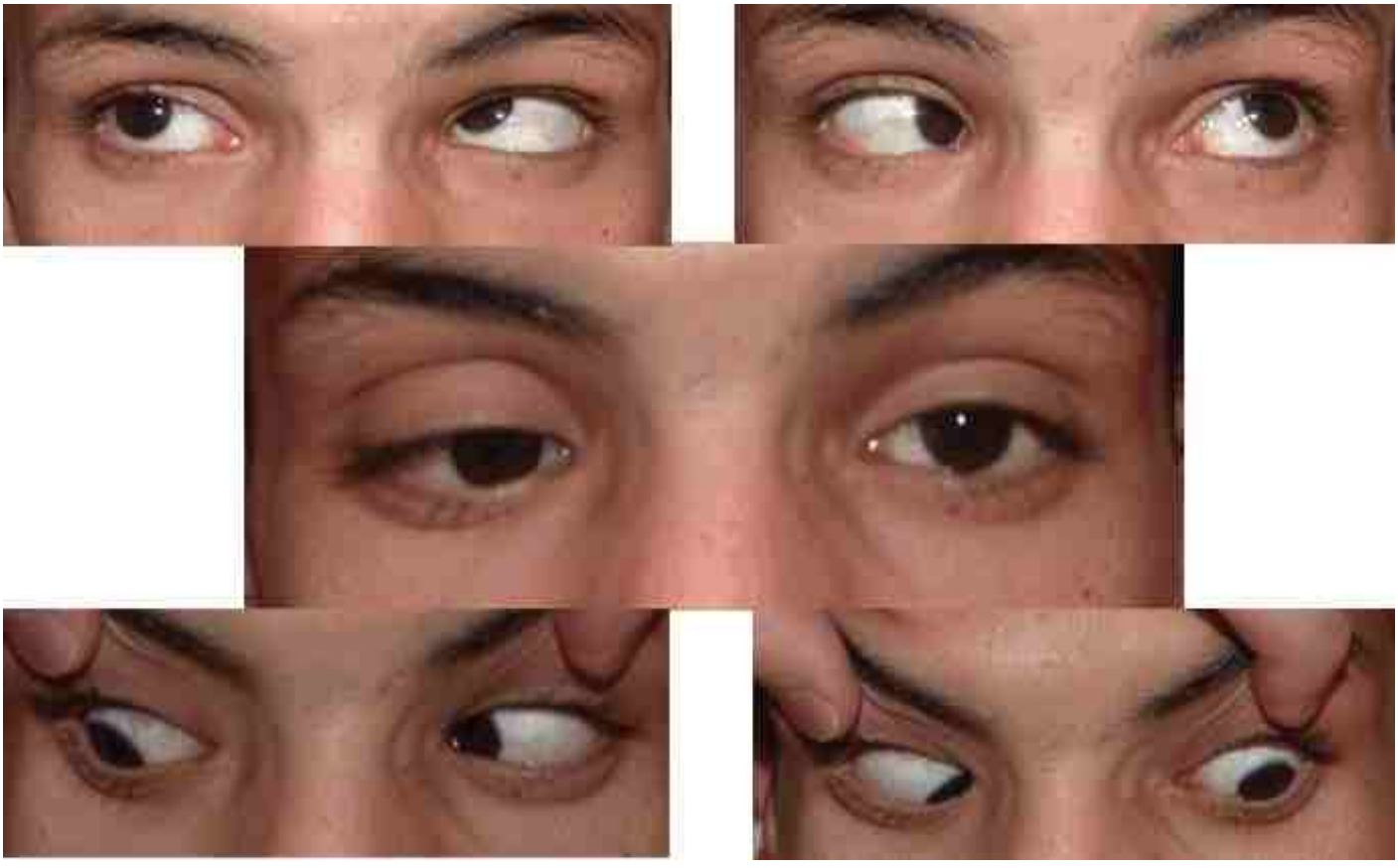
Monocular elevation deficiency associated with tight ipsilateral inferior rectus muscle and fixation preference for the contralateral eye is a well-recognized entity in strabismus. Previous reports of the phenomenon, however, tend not to report the results of oblique muscle forced duction testing in the fixating eye (1-4). The purpose of this report is to raise awareness that this form of strabismus can be associated with (and may be secondary to) a floppy superior oblique muscle tendon in the contralateral fixating eye.

CASE SERIES:

All 4 patients (see **Figures 1-4** on this, adjacent and succeeding pages) were previously diagnosed with congenital monocular elevation deficiency. All had grossly comitant horizontal deviation (3 with esotropia, 1 with exotropia), grossly comitant hypotropia except in upgaze (because of mild elevation limitation in the hypotropic eye), overdepression in adduction of the hypotropic eye, pseudoptosis in the hypotropic eye, variable head tilt towards the hypotropic eye, limited Bell's phenomenon in the hypotropic eye, and bilateral fundus excyclotorsion. In addition to inferior rectus muscle restriction in the hypotropic eye, forced duction testing under general anesthesia was significant and positive for contralateral superior oblique muscle tenon laxity (5).

DISCUSSION:

Figure 1 *(Khan): This 17-year-old male had uncorrected visual acuity of 20/30 in the right eye and 20/20 in the left eye. In primary position at near there was a 25 prism diopter (pd) right esotropia and 40 pd right hypotropia. Cycloplegic refraction (cyclogel 1%) was unremarkable. Primary position and oblique positions of gaze are shown with the preferred left eye fixating (eye with the lax superior oblique muscle tendon [SOMT]).*



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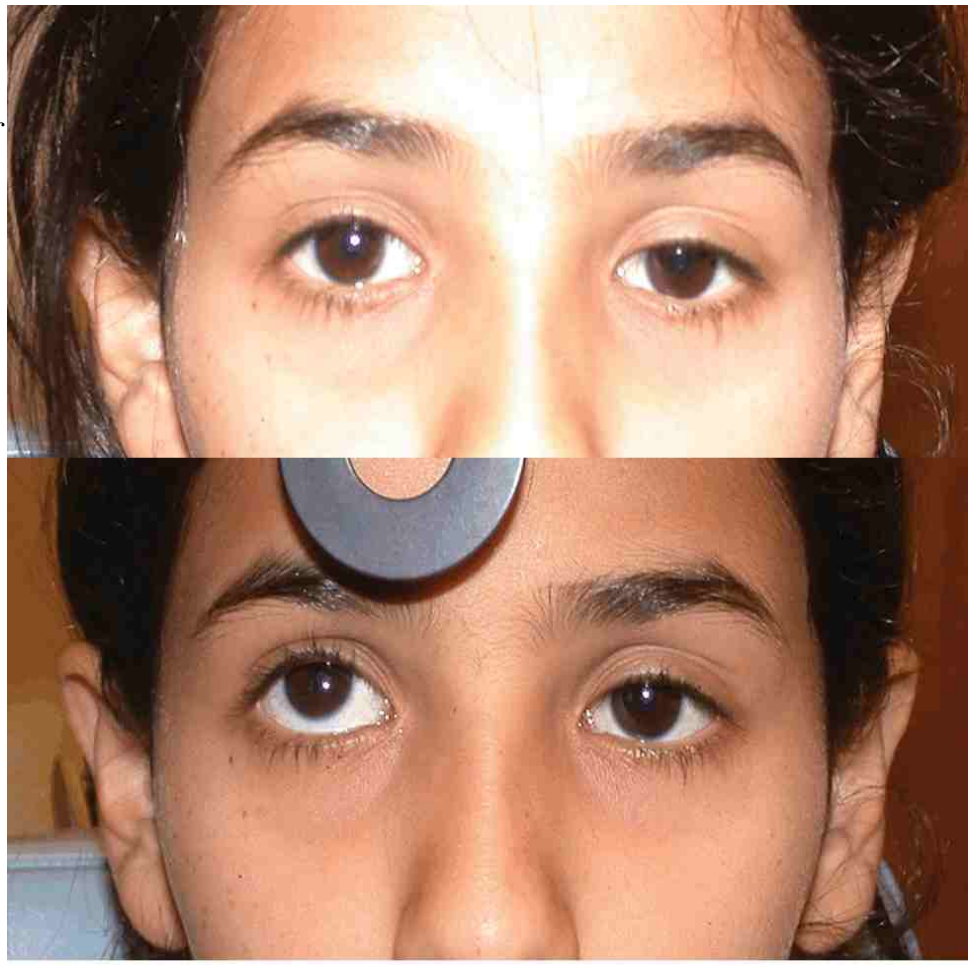

Figure 2 *(Khan): This 10-year-old girl had uncorrected visual acuity of 20/20 in the right eye and 20/25 in the left eye. In primary position there was a 12 pd exotropia and 8 pd left hypotropia. Cycloplegic refraction (cyclogel 1%) was unremarkable. Primary position is shown, with preferred right eye fixating (eye with lax SOMT) and with forced fixation of the non-preferred left eye (with tight inferior rectus muscle).*

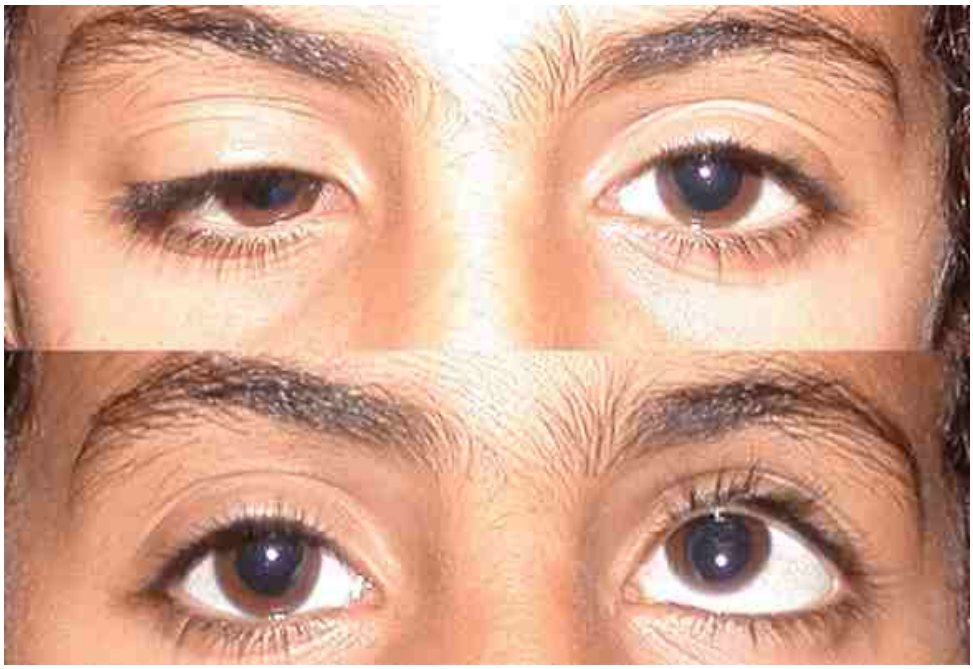

Figure 3 *(Khan) This 11-year-old girl an had uncorrected visual acuity of 20/20 in both eyes. In primary position at near there was a 20 pd esotropia and a 45 pd right hypotropia. Cycloplegic refraction (cyclogel 1%) was unremarkable. Primary position is shown, with preferred left eye fixating (eye with lax SOMT) and with forced fixation of the non-preferred right eye (with tight inferior rectus muscle).*

Figure 4*(Khan):* *This 4-year-old girl had uncorrected visual acuity of 20/50 in both eyes. In primary position at near there was an esotropia of 15 pd and a right hypotropia of 30 pd. Cycloplegic refraction (cyclopentolate 1%) was +2.50-3.75x030 in the right eye and +2.50-2.50x180 in the left eye, with which her vision improved to 20/30 in both eyes. Shown are gaze up and to the right and primary position, both with fixation of the preferred left eye (eye with lax SOMT).*

DISCUSSION

In the setting of unilateral superior oblique muscle weakness, fixation with the affected eye has been described as causing "inhibition palsy of the contralateral antagonist," i.e., an apparent underaction of the superior rectus muscle in the non-preferred eye (6,7). The actual diagnosis can be made when ductions demonstrate elevation in the hypotropic eye whereas versions do not; however, making the true diagnosis can be more difficult in the setting of a long-standing "fallen eye syndrome." (6,7). In the latter scenario, constant hypotropia results in inferior rectus muscle contracture and a true restrictive strabismus in the non-preferred eye; therefore, ductions become abnormal in addition to versions and making the correct underlying diagnosis becomes more difficult (6,7)

Theoretically, the "fallen eye syndrome" can be recognized by the presence of inferior oblique muscle overaction in the fixating eye, superior oblique underaction in the fixating eye, and an increased hypotropia during head tilt toward the fixating eye (away from the hypotropic eye) (6,7). Practically, however, these findings do not distinguish the condition from a tight inferior rectus muscle in the hypotropic eye without contralateral superior oblique muscle weakness – i.e., monocular elevation deficiency. Monocular elevation deficiency (formerly "double elevator palsy") refers to congenital lack of elevation in one eye with or without ipsilateral ptosis (1-4).

There are at least 3 etiologies defined in the literature for monocular elevation deficiency. – a supranuclear inability to monocularly elevate (with an intact Bell phenomenon), superior rectus muscle paresis, and inferior rectus muscle restriction (which may be primary or secondary to elevation inability)(1-4). Many cases are associated with ipsilateral inferior rectus muscle restriction, which is sometimes considered the primary abnormality (1-4). This tight overacting inferior rectus muscle can secondarily lead to a picture that resembles the "fallen eye" syndrome -

contralateral inferior oblique muscle overaction, contralateral superior oblique underaction, and an increased hypotropia during contralateral head tilt. In this situation, a lax superior oblique muscle tendon in the fixating eye may be the only clue to the original pathology.

In the current case series fixation preference for the eye with lax superior oblique muscle tendon may have led to a tight inferior rectus muscle in the non-preferred eye; however, a congenital association between tight inferior rectus muscle and contralateral lax superior oblique muscle tendon cannot be ruled out. While the true incidence of superior oblique muscle tendon abnormality is unknown, some authors have the incidence as high as 87% in diagnosed congenital superior oblique palsy (8). Patients diagnosed with monocular elevation deficiency should have careful attention to forced duction testing of the superior oblique muscle tendon. in the other eye Fixation preference for an eye with lax superior oblique muscle tendon may be an under-recognized cause of monocular elevation deficiency.

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ABSTRACTS

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General Medicine

from the AAOs Academy Express June 19, 2008
Study Suggests Physician Emphasis on Negative Outcomes Decreases Patient Quality of Life. Br J Ophthalmol June 2008 .

A time trade-off utility test was administered to 247 vitreoretinal patients to assess their baseline quality of life or utility and any change if the interviewer emphasized either possible negatives outcomes of their current ocular problem or possible outcomes. Mean baseline utility was 0.87. It significantly decreased to 0.80 with the bad news scenario but did not significantly change for the good news one.

General Outcome

from the AAOs Academy Express June 5, 2008.
Visible Strabismus Negatively Impacts Patients' Ability to Find a Partner. Br J Ophthalmol, June 2008

Researchers interviewed Swiss dating agents using a validated questionnaire. Of the 40 dating agents, 92.5% judged that strabismic subjects have more difficulty finding a partner. Such difficulty was perceived as being greater in exotropic than in esotropic persons. Among the seven facial disfigurements considered, strabismus was believed to have the third largest negative impact on finding a partner, after strong acne and a visible missing tooth. 'Because surgery in adults reduces not only physical but also psychosocial difficulties, it cannot be considered a cosmetic procedure', wrote the authors.

Vision / Visual Acuity / Amblyopia

from the AAOs Academy Express July 31, 2008.
Study May Help Optimize Timing and Modality of Preschool Vision Screening Programs. Ophthalmology July 2008.

This report from the Multi-ethnic Pediatric Eye Disease Study finds the prevalence of strabismus among Hispanic/Latino children, ages six to 72 months, to be 2.4 percent; among African American children, 2.5%. The condition was more prevalent in older children than in younger children. Amblyopia was found in 2.6% of Hispanic/Latino children and 1.5% of African American Children. Seventy-eight percent of the amblyopia cases were attributed to refractive error, and the prevalence of amblyopia did not vary with age.

Lack of Concordance between Fixation Preference and HOTV Optotype Visual Acuity in Preschool Children. The Baltimore Pediatric Eye Disease Study. Ophthalmology 2008, in press. Friedman DS, Katz JK, Repka MX, Giordano L, Ibironke J, Hawse P, Tieisch JM. [Authors Abstract radically abbreviated by PER]

Conclusions: Fixation preference testing, when used as part of a population based research project does not identify accurately preschool children with 2 lines or more of IOD in presenting visual acuity The clinical value of this test is poor and its use for diagnosis and monitoring interventions should be reconsidered. (No corresponding information)

Prevalence of Hyperopia and Associations with Eye Findings in 6 and 12 Year Olds. Ip JM, Robaei D, Kifley A, Wang JJ, Rose KA, Mitchell P. Ophthalmology 2008; 115:678-685.e1 [Authors Abstract radically abbreviated by PER

Conclusions: Moderate hyperopia was strongly associated with many common eye conditions, particularly amblyopia and strabismus, in older children. Birth parameters did not predict moderate hyperopia. (Prof Paul Mitchell, Dept Ophthalmology, Centre for Vision Research, University of Sydney, Westmead Hospital, Hawkesbury Road, Westmead, NSW, 2145 Australia)

Binocular Vision

Local Binocular Fusion is Involved in Global Binocular Rivalry. Takase S, Yukumatsu S, Bingushi K. Vision Research 2008; 48:1798-1803 [Authors Abstract]

We examined whether interocular inhibition in binocular rivalry could occur at the interocular intersection of horizontal and vertical rectangular patches which are locally fusible but globally rivalrous between the two eyes. We measured contrast increment (and decrement) thresholds of a monocularly presented probe which was presented on the horizontal patch corresponding to the intersection. We found that the threshold was higher which the horizontal patch was perceptually suppressed than when it was dominant. In addition, threshold elevation did not occur when both patches were dominant, or when the horizontal patch was viewed in isolation. These results indicate that interocular inhibition occurs at the potentially fusible region, and the determination of binocular fusion or binocular rivalry does not depend on physical stimulus but rather perceptual state at the time. (Dr. Takase, Dept Psychology, Chukyo University, 101-2 Yagotohonmachi, Showa-ku-, Nagoya, Aichi 466-8666, Japan.

Ocular Motility

Saccadic Eye Movements and Anti-Epileptic Drugs. Lo C, Shorvon SD, Luxon LM, Bamiou D-E. Epilepsy Research 2008; 78:93-101 [Authors Abstract]

Saccadic eye movements can be used to evaluate different aspects of brain function, and in this article we are concerned with possible applications in relation to anti-epileptic drug treatment. Recent improvements in the technology of measurement have improved the sensitivity and objectivity of the measures. Here we review the neurophysiology of saccades, their classification, their anatomical basis and cortical control, and then published research articles concerned with the influence of anti-epileptic drugs on saccades and their parameters. It seems likely that certain anti-epileptic drugs (especially those acting on ion channels) exert their effect on saccades through ion channels, and this may have relevance to clinical and pharmacogenetic studies. (Dr. Chiening Lo, Inst Neurology, University College London, Queen Square WC1N 3BG, UK. Fax: 44-207-676-2155)

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from The Brain Trauma Foundation Newsletter, "Research Updates".

In April, Dr. Jamshid Ghajar, Principal Investigator and President of BTF (Brain Trauma Foundation), and Dr. Minah Suh, one of the leading investigators of the CNRC-TBI (Cognitive and Neurobiological Research Consortium in Traumatic Brain Injury), presented the results of an eye tracking study at the Neural Control of Movement Conference in Seville, Spain. This study demonstrates that **mild TBI patients have deficits in predictive eye movements under dual task conditions, and that these deficits are correlated with diffusion tensor imaging measure of white matter brain damage. The results suggest that eye movement testing may be a sensitive metric for mild TBI**, and an improvement over traditional testing methods. (*The studies are supported by a collaborative grant from the McDonnell Foundation to the Brain Trauma Foundation, with lead investigators from Weill Comell Medical College, UC San Francisco and US Berkeley.)*

Strabismus Surgery

Long-Term Results of an Intraoperative Adjustable Superior Oblique Tendon Suture Spacer Using Nonabsorbable Suture for Brown Syndrome. Suh DW, Oystreck DT, Hunter DG. Ophthalmology 2008, in press. [Authors Abstract]

Objective: To investigate the long term surgical outcome of Brown syndrome using an intraoperative adjustable superior oblique (SO) tendon suture.

Design: Retrospective case series.

Participants: Thirteen patients with congenital unilateral Brown syndrome operated on at the Wolfe Eye Clinic from 2001 through 2007.

Methods: Retrospective analysis of consecutive patients managed with the SO suture spacer followed up for at last 10 months.

Main Outcome Measures: Surgical intervention for patients having severe or moderate forms of Brown syndrome. Postoperative effect on abnormal head posture, vertical strabismus in primary gaze, vertical strabismus into affected side gaze, and elevation in adduction.

Results: The mean duration of followup was 30 months (range 10-72 months). Abnormal head posture improved from 13° (range, 0°-30°) to 0.4° (range 0°-5°). Vertical strabismus in primary gaze improved from -10 pd (range, 0 pd to -35 pd) to 2.8 pd (range,-16 pd -16 pd). Vertical in side gaze improved from -20 pd (range, -35 pd to -8 pd) to -1.5 pd (range -20 pd to 18 pd). Elevation in adduction improved from -3.5 (range -4 to -2) to -0.4 (range, -2 to 4). Four patients had an overcorrection and 2 patients experienced an increasing late effect. In no patient did a late undercorrection develop.

Conclusions: The SO suture spacer procedure alleviated abnormal head positions in patients with Brown syndrome by improving vertical strabismus in primary position and in the affected field of gaze while avoiding overcorrection in contralateral gaze. The benefits of the procedure persisted over time. (Dr. Suh, Wolfe Eye Clinic, 6200 Westown Parkway, West Des Moines IA 50266.email:dowsuh@gmail.com)

Rectus Muscle Posterior Tenon Fixation as an Inactivation Procedure. Heo H, Park SW. Am J Ophthalmol 2008;146:310-317.e2 [Authors Abstract]

Purpose: To report a surgical technique and the results of rectus muscle posterior Tenon fixation as an inactivation procedure for treatment of Duane syndrome, restrictive strabismus, and long-standing paralytic strabismus, which conventionally require large rectus muscle recession.

Design: Prospective, interventional case series.

Methods: Three eyes in three Duane syndrome patients, one eye in one myopic strabismus fixus patient, one eye in cone complete third nerve palsy patient ad one eye in complete sixth nerve palsy patient underwent rectus muscle inactivation by disinsertion and posterior Tenon fixation of its insertion. The main outcome measures were the postoperative eye position in all patients, the presence of upshoot or downshoot on adduction, and, in Duane syndrome patients only, the height of the palpebral fissure.

Results: In Duane syndrome patients, the upshoot and the downshoot were improved markedly, and the height of the palpebral fissure was increased on adduction after the operation as compared with before the operation; the other patients had improved ocular alignment after surgery.

Conclusions: We believe that rectus muscle inactivation by fixation of its insertion to posterior Tenon is an effective and less invasive technique for achieving profound weakening of a rectus muscle compared with periosteal fixation of the rectus muscle. (Hwan Heo, Dept Ophthalmology, Chonnam National University Medical School and Hospital, Tong-gu, Gwangju, South Korea)

Myopia

Features of the Multifocal Electroretinogram May Predict the Rate of Myopia Progression in Children. Luu CD, Foulds WS, Tan DTH. Ophthalmology 2007; 113:1433-1438 [Authors Abstract radically abbreviated by PER

Conclusions: Decreased foveal function as determined by the mfERG is associated with a high rate of myopia progression. Electrophysiologic examination of central retinal function may predict the progression and severity of myopia in school children. (Dr. Luu, Singapore Eye Research Inst., 11 Third Hospital Avenue, #06-00, Singapore 168751)
(***Since atropine and other medical treatments to prevent the progression of myopia remain so suspect, this would be one way to identify those myopes most likely to progress to "pathologic myopia"and who really should have preventative treatment to avoid the several nasty complications of high myopia such as the following -per:***)

from the AAOs Academy Express July 31, 2008.
Staphyloma Progression Worsens With Age. Am J Ophthalmol, July 2008.

Researchers evaluated the morphologic features, including grade and type, of posterior staphylomas in 108 patients (209 eyes) with high myopia. The prevalence and higher grades of staphylomas were significantly higher in patients age 50 and older, compared to those younger than 50. Overall, type II staphyloma (grade 1) was the most prominent in both young and older eyes; however, in older subjects, the incidence of type II staphyloma decreased significantly while type IX increased significantly. The authors conclude that progression from type II to type IX may increase the mechanical tension on the macular area and optic disc, which may cause the progession to severe myopic retinal degeneration.

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HYDE PARK EDITORIAL: The Editor's Soapbox, Sandbox & B'LOG

(Prehistoric) Since 1985

More and More Stereoscopic 3D Movies, TV and Web No Rx Specs! Ocular MotilityDiagnosis of Autism; Dr. Nurse; Tests; Hospital$$$$; Blondes; MisInsurance; Bad Coffee; Gas (CNG); 55:Vespa; MENTAL SIGNAGE .

BINOCULAR VISION

Stereoscopic 3D Movies AND TV are HERE

Stereoscopic depth perception remains the epitome of vision and binocular vision. And soon, even now, you can have full depth most anywhere AS A REGULAR PART OF YOUR AT HOME ENTER-TAINMENT including BOTH your TV and your computers....

But

demonstrating 3D stereoscopic displays in two dimensional media, can be most difficult as shown here. Only the far model's big dark glasses are the only clue. They are not sunglasses even tho' wearing sunglasses indoors is quite fashionable. Those are,rather, the very expensive and necessary alternating electronic shutter spectacles that stereo displays require to translate two screen

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("haploscopic") images into one 3D image. That car would be doubled if this were a real picture of the TV set. To see what that really looks like, try one of several ***youtube videos*** *found under search topics such as "3D tv". Here are some specific sites:*

www.youtube.com/watch?v=

j7ZSNPAknhl

cJdIOcYWjoI

3STFXathsk8

BE SURE TO CAREFULLY DUPLICATE the CASE OF LETTERS...

Obviously, unless you enjoy viewing diplopic imagery, all viewers of a TV screen in real 3D mode wll have to be wearing a pair of those electronic alternating shutter specs.

By the way, Samsung has upgraded its 3D plasma TVs (available in 42 or 50 inch versions) to handle HD (High Definition) tv signals as well as the older ordinary definition ones. [We still have difficulty telling the difference on a-b comparison and the Dish network we are now on makes that so easy with adjacent channels HD and OD]. Whatever, be sure to read the CU report on the following page, top.

The 3D Internet !!!

from *the Wall Street Journal* July 17, 2008 by Benjamin Duranske. **The 3D Internet Will Change How We Live.** "... Sony is developing a 3D environment for its popular Play Station 3 called 'Home' and Google recently launched its own world 'Lively'. Dozens of major brands and organizations, including MTV, Playboy, CBS, Cisco, Toyota, L'Oreal and the American Cancer Society have significant virtual world presences. IBM has made a particularly strong commitment to virtual worlds, and regularly holds meetings on a sprawling, privately firewalled Second Life campus. ... Bandwidth and processing power are constantly growing, leading to several convergent trends. First, interfaces are moving closer to reality. Over the last 30 years, we have gone from punch cards to typed commands to drag and drop folders to Windows Vista's 3D panels. Second, hardware that make 3D immersion possible - from motion-control devices like Nintendo's Wiimote to $90 Webcams that track face and body movements - is now reaching average consumers' homes. ... The allure of the 3D Internet is easy to see. What auto maker would be content to put 2D pictures of a new SUV on its Web site when it can offer buyers a virtual, first person drive down a snowy mountain road? What sculptor will want to display 2D photographs of her work when she can invite collectors on a guided tour of her virtual sculpture garden? ... No privately held virtual world is going to end up in sole possession of the 3D Internet, just as no early 2D 'walled garden' network provider like Prodigy, Compuserve or AOL owns the 2D Web today. A number of industry groups are working on open 3D standards. As soon as one of these gains widespread acceptance, anyone will be able to build a virtual world that is connected to any other similarly coded virtual world - just like HTML, now allows anyone to create a 2D Web page that is connected to any other 2D Web page. If current trends hold, the Internet will evolve into a 3D space, and virtual worlds will become an integral part of human communication. Real life will never be the same. (*Mr. Duranske, a writer and attorney, is the author of 'Virtual Law: Navigating the Legal Landscape of Virtual Worlds' [American Bar Association Publishing, 2008])"*

HARD EXPERIENCE FROM C.U.–>

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3D GETS A C-

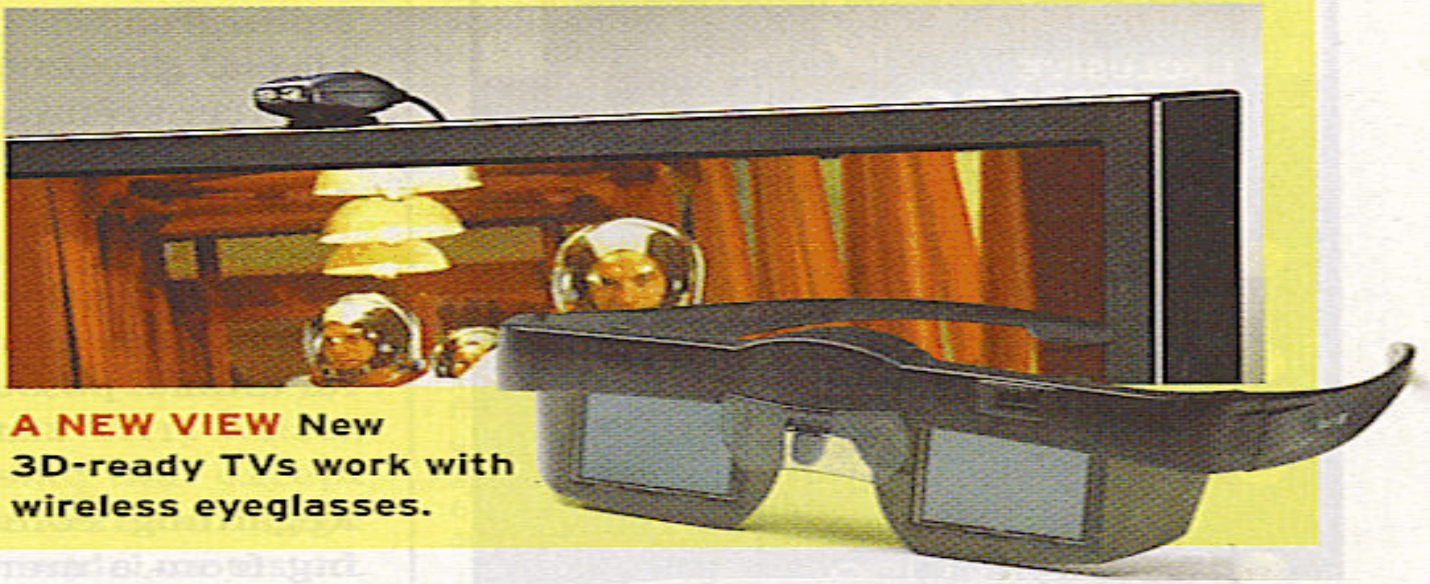
Like fuel-efficient cars and hip-hugging jeans, 3D is "in" again. 3D flicks such as "Meet the Robinsons" and "U2 3D" have drawn crowds to theaters, and Disney plans to step up its 3D releases starting later this year.

Now TV makers are trying to bring the experience home with high-definition TVs capable of displaying 3D images. Samsung and Mitsubishi, the two leading 3D proponents, together offer many "3D ready" rear-projection sets. (Samsung also sells a plasma set.) Software and special "shutter" eyeglasses work together to combine left- and right-eye images, creating a 3D effect. But you'll also need a Windows MediaCenter PC and a fairly robust video card with a DVI or HDMI output.

We used a 56-inch Samsung DLP TV ($2,300) and a 3D kit from eDimensional that includes a pair of wireless shutter glasses and a transmitter. We had to go to another company's Web site to download the 3D software and then download separate files so we could play DVDs.

Getting the software to work properly was arduous and possibly beyond the ability of most consumers. We also had problems getting the audio and video to play at the same time.

With standard, two-dimensional DVDs, we did see a pseudo-3D effect, but objects didn't "pop" as they do on, say, an Imax screen. When we viewed a 3D DVD, the effect was more realistic but not dramatically so.



A NEW VIEW New 3D-ready TVs work with wireless eyeglasses.

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Those "wireless eyeglasses" in the preceding picture sure are ugly, no? They are only $50 a pair. Maybe you could find the ones that the Samsung model on the previous first page is wearing. They don't look near as ugly as these do! We sure could use them for monocular and binocular vision testing!

The total cost for all the 3D paraphenalia is akin to videogame setups like Wii or X=Box/

3D viewing technology is also finding another important task and place in our submarines (see below)! and elsewhere including evidence collection (as in CSI stuff and a lot easier and better than plaster casting)

3-D Images Available in the Field

A lightweight, cordless 3-D sensor enables the imaging of objects such as tire tracks. Image courtesy of Fraunhofer Institute for Applied Optics and Precision Engineering.

The British Royal Navy's Astute-class submarines will be equipped with nonhull-penetrating periscopes from Thales UK, based in Addlestone. The electro-optic systems will enable greater flexibility in the design of the submarines and will provide operators with an improved view of the surface without revealing their vessel's position. The optronic masts will be powered by the VxWorks real-time operating systems, which are produced by Wind River Inc. of Alameda, Calif.

The next-generation submarines, which will be designed to patrol the seas worldwide, would be particularly vulnerable to detection by surface ships when their periscope is raised to assess a situation on the surface. The nonhull-penetrating design of the masts reduces this risk. It enables the sensor head unit to be extended from the submarine fin, where it can rapidly perform a 360° scan above the surface. The image data would be analyzed by submarine personnel afterward to minimize the risk of detection.

The masts will use the VxWorks operating systems — running on Thales' quad PowerPC AltiVec commercial off-the-shelf boards and the AdaCore GNAT Pro software — to power the stabilization system (three-axis to subpixel accuracies), the video and thermal camera control, the communication with the in-hull systems, and the control of the mechanisms and motors in the sensor head unit. The latter is an electro-optical assembly that contains cameras, optics, environmental sensors and stabilization mechanisms. It is designed to function in temperatures ranging from 215 to 60 °C and to withstand a nearby blast.

Inside the hull, the mast control unit coordinates system activity and communicates with the submarine's tactical, data and combat systems. Using two processors running on VxWorks, it controls the mast-raising equipment and the azimuth drive module. The module rotates the sensor head unit and forms part of the stabilization system, which requires high-performance servo control to compensate for the boat's movement and to provide the desired clear image for an effective inspection. □

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MOVIES

Journey to the Center of the Earth 3D *Directed by Eric Brevig; rated PG; out now*

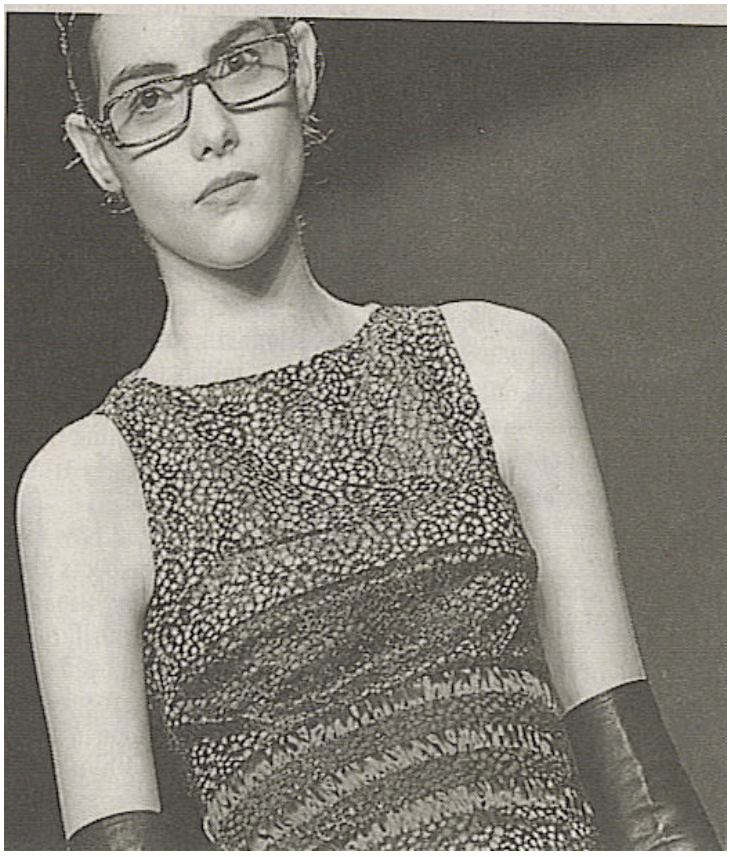
To put on 3-D glasses, as cumbersome a visual aid now as they were in the '50s, is already to surrender to cheesiness. This loose take on Jules Verne's novel, with Brendan Fraser as the wayward scientist, is the ideal vehicle for stuff jumping out at you: yo-yos, waterspouts, antennae, dinosaur drool, the works. It's fun for tweens, a sedative for their parents. **B-**

Ordinary 2D Vision/Seeing

SpectaCles are IN VOGUE!

(?Again, OR First Ever!!!???)

But only for FOR FAKE SEEING !!!!



A DISPENSING GOLD MINE!!

from *The Wall Street Journal* April 26, 2008 by Ray S. Smith. **Life After Lasik: A Clear-Eyed URGE TO WEAR GLASSES. SPECS ARE LOOKING HOT ON RUNWAY MODELS; The no-Rx frame-up.**

"... The patient,...says, yes, his vision [***sc !***] is fine - he just likes wearing glasses. 'It's a fashion statement,'.... 'It's my signature.' People 'come up to me and ask, "Where did you get your glasses?"... Lasik surgery ... wasn't seen as just corrective, but also cosmetic: Ditching the four-eyes look was part of the payoff. **But amid a push by glasses makers, as well as fashion designers with their own eyewear lines, NON-prescription glasses** [BOLD =Ed emphasis] have become a hot accessory. ... models wearing bold rectangular glasses in their runway shows. 'I cannot recall ever seeing models in specs on major runways before this year ' ... Designers have never been shy about outfitting models with scarves, shoes and bags from their collections. But 'they never made passes at models with glasses' ... The LensCrafters chain, once known for dowdy ads touting discounts and quick service, now uses supermodels like Heidi Klum to hawk its wares in fashion magazines like Vogue. It has redecorated stores with chandeliers, flowers and leather benches to make shopping for glasses seem less medical. Another addition: full length mirrors to let customers check out their complete look.[cc]

Ads in magazines ranging from GQ to New York are no longer limited to designer sunglasses. Prada and Gucci are among the brands featuring models posed wearing retrolooking rectangular frames (think Buddy Holly). High end eyewear brand Oliver Peoples now releases four collections a year, up from two, two-year ago, hoping customers will want to change frames as often as they, perhaps, switch handbags. ... upscale

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eyewear retailer Morgenthal Frederics estimates **sales of glasses with non-prescription lenses at its seven stores are expected to rise 50% to 500 pairs this year,** compared with 2005. ...has seen a fivefold increase in requests for glasses from people who don't actually need them to see. ... Buyers are quite frank about not needing a prescription,.... Even clothing stores... are selling retro nonprescription glasses. ... Lasik surgery itself is suffering a slowdown amid the weaker economy. Volumes peaked in 2000. ... Wearing glasses help her look more like 'boss lady' in meetings, she says, and it's cheaper than buying loads of designer prescription frames. On top of that, having a selection of frames on hand makes it easier for her to match her outfit. .... some patients keep wearing glasses after Lasik surgery because they're part of a person's established look. .. Drew Carey [does this]. ... Morgan Cullen, a 27 year old fashion model and aspiring actress, wears nonprescription black rectangular Lacoste glasses in her portfolio to broaden her career prospects. 'Uneducated people think models are dumb', says Ms. Cullen, who has 20/20 vision [sc] and whose father is an optometrist. Glasses, she says, 'make people take you more seriously'."

(*Didn't we use to joke that wearing glasses was worth AT LEAST ten points or more of I.Q? Is being intelligent replacing cool dumb? -or do computer geeks now RULE?-Ed*)

Dyslexia

from *The Wall Street Journal* "Science" by Robert Lee Hotz. **How Alphabets Shape the Brain.** "... Neuroscientists studying reading disorders have begun to wonder whether the actual character of the text itself may shape the brain. Studies of school children who read in varying alphabets and characters suggest that those who are dyslexic in one language, say Chinese or English, may not be in another, such as Italian. Dyslexia, in which the mind scrambles letters or stumbles over text, is twice as prevalent in the U.S. where it affects about 10 million children, as in Italy where the written word more closely corresponds to its spoken sound. ... to read and write Chinese, the demands of reading draw on parts of the brain untouched by the English alphabet new neuroimaging studies reveal. It's the same with dyslexia. ... Arabic numerals of standard arithmetic - used by readers of Chinese and English alike - activate different brain regions depending on which of the two languages people had first learned to read. ... we may regard dyslexia in Chinese and English as two different brain disorders ... because completely different brain regions are disrupted. It's very likely that a person who is dyslexic in Chinese would not by dyslexic in English. ...

"Western alphabets. English and 218 other language, from Alsation to Zulu, share variations of the same Latin character set. But that set is only one of 60 writing systems used among the world's remaining 6912 spoken languages... The schooling required to read English or Chinese may fine-tune neural circuits in distinctive ways. To the ABCs of English, we essentially harness our listening skills to a phonetic code. To become literal in Chinese, however, we must make much heavier use of memory, motor control and visual-perception circuits located toward the front of the brain. Children can master the 6000 or so Chinese characters used in Mandarin and Cantonese text only by laboriously copying them out over and over again, until each abstract form becomes second nature. ... In ways that ancient scribes never imagined, text has transformed us. Every brain shaped by reading, whether it is school in Chinese or English text, measurably differs - in terms of patterns of energy use and brain structure - from one that has never mastered the written word, comparative brain imaging studies show. There are real differences that emerge because of literacy. ... social psychologists speculate that the brain changes caused by literacy could be involved in cultural differences in memory, attention and visual perception. ..." (*Robert Lee Hotz shares recommended reading on this topic and responds to reader comments at WJS.com/OnlineToday. Email him at* sciencejournal@wsj.com)

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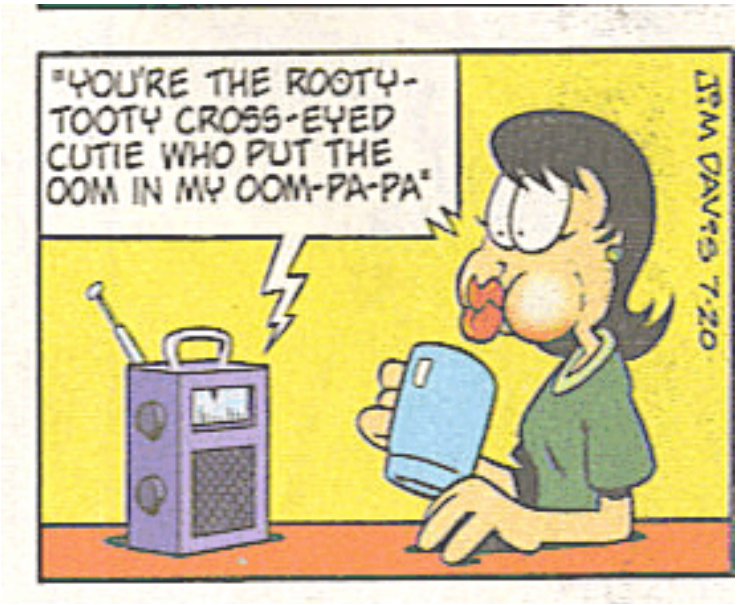
OCULAR MOTILITY and STRABISMUS



from *The Wall Street Journal* July 8, 2008 by Jeremy Singer-Vine. **New Ways to Diagnose Autism Earlier. Detection at younger ages leads to greater gains in language and IQ: Predicting risk with Eye-Movement Sensors.** "... By identifying children early who may be at risk of developing autism, even without a definitive diagnosis, parents can consider initiating behavioral therapy, the most widely validated treatment for the condition. ... Researchers at Canada's McMaster University recently announced that they had developed a computerized test using eye-movement sensors that aims to predict the risk of autism in children as young as 9 months. The system, which administers five eye-tracking tests over 10 minutes, measures the direction and fixation of a child's eyes when confronted with computerized images, including human faces. Yale University's Toddler Developmental Disabilities Clinic is using similar eye-tracking technology to study patterns in gaze behavior in children ages 3 months to 3 years. ...."

But eye-tracking won't pick out all children with autism. ... the disorder can manifest itself in a variety of ways at difference ages, such as a child not responding when called or failing to exhibit normal body gestures. Some children also won't cooperate with the eye-tracking equipment. ..., no available .. test can diagnose it. ..."

A toddler participates in an experiment **designed to study the preference for direct gaze**, the common response in healthy children.

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Elsewhere in Medicine

"Dr. Nurse"

from *The Wall Street Journal* April 2, 2008 by Laura Landro. **Making Room for 'Dr. Nurse'.** "As the shortage of primary care physicians mounts, the nursing profession is offering a possible solution: the 'doctor-nurse'. More than 200 nursing schools have established or plan to launch **doctorate of nurse practice** [DNP] programs to equip graduates with skills the schools say are **equivalent to primary care physicians.** The two year programs, including a one year residency, create a 'hybrid practitioner' with more skills, knowledge and training than a nurse practitioner with a Master's degree. ... DNPs are being trained to have more focus than doctors on coordinating care among many specialists and health care settings. To establish a national standard to **Doctors of Nursing Practice,** the non-profit Council for the Advancement of Comprehensive Care plans to announce Wednesday that the **National Board of Medical Examiners** has agreed to develop a voluntary DNP certification exam based on the same test physicians take to qualify for a medical license. ...

Nurses with doctorates use DrNP after their name, and can also use the designation Dr. As a title. Physician groups want DNPs to be required to clearly state to patients and prospective students that they are **not medical doctors**.....there are now more than 125,000 nurse practitioners in the U.S. Nurse practitioners in some states are required to work with or be supervised by physicians [MDs], but often have independent practices in family medicine, adult care, pediatrics and oncology. ...Nurse practitioners can write prescriptions, are eligible for Medicare and Medicaid reimbursement, and often act as the primary health care provider for their patients. Nurse practitioners with Master's degrees are already filling the primary care shortages and providing quality, cost-effective care, many times in places that physicians are unwilling to practice. ... With an acute shortage of nurses, some medical professionals worry that the doctoral programs, with promises of higher paying jobs and prestige, will lure more nurses away from the critical tasks of day-to-day bedside care. ... nursing schools had to turn away 40,285 qualified applicants to bachelor's and graduate nursing programs in 2007 in part because of an insufficient number of faculty, according to the American Association of Colleges of Nursing. ... As [MD]doctors face shrinking insurance reimbursements and rising malpractice insurance costs, more medical students are forsaking primary care for specialty practices with high incomes and more predictable hours. As a result, there could be a shortfall ranging from 85,000 to 220,000 primary care physicians by 2020, according to various estimates. ... doctors of nursing practice can have hospital admitting privileges. ..."

from *The Wall Street Journal* January 4, 2008 by Anna Wilde Mathews. **Bad Cancer Tests Drawing Scrutiny.** "Thousands of breast cancer patients may be getting the **wrong treatment because of errors in two laboratory tests** widely used to determine which drugs are prescribed. ...

'We all make the assumption that **every test is done well. It turns out it's not a correct assumption'...** a second test, few doctors order them. ... The tests relating to Herceptin and the antihormone drugs... require pathologists to make judgment calls after looking at tissue through a microscope,... **14% to 16% of those judged positive for Her-2 were actually negative. Of those judged negative, 18% to 23% were in fact positive. ... tissue from 763 patients with negative results was retested at a different lab in 2005 and 2006. The new tests concluded that 317 of those were actually positive. ... 70% of 105 patients scored as negative on the estrogen test were re-labeled as positive when the tissue was retested by an experienced lab. The analysis found that positive results were almost always correct**. ... pregnancy tests with this rate of inaccuracy, they would be taken off the market. ... It means **there are a lot of women being treated inappropriately.** ...

Now labs must pass outside proficiency checks on only 83 types of tests. That list, devised in 1992, doesn't include the breast cancer tests or dozens of others developed more recently. ... small variations in procedure can affect results. [For these tests] findings can change depending on how much the tissue samples are heated and what preservative is used. ... results varied based on the day of the week... -

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because tissue that sat in a refrigerator or in a preservative over the weekend was different from tissue examined [immediately]. ... Hormone testing methods are 'a chaos'. ... every lab uses a different method and different criteria to call a case positive."

My RULE is: Repeat ANY TEST That significantly (= Risk) CHANGES YOUR COURSE OF ACTION.... -Ed

from *The Wall Street Journal* October 27-28, 2007 by Peter B. Bach, MD. **Why We'll Never Cure Cancer. Your odds of survival depend heavily on the QUALITY OF YOUR PHYSICIAN.** "... decry the inability of the...system to deliver these advances to the patients who need them. The gaps are glaring:

•*Prevention:* In colon cancer ... adequate utilization of colonoscopy alone could reduce the colon cancer death rate by 50%. ... however, only [40% of] people who should be screened have ever gotten a colonoscopy ... in part because doctors forget to [Rx]it. ... Not all colonoscopists .. are good at finding the precancerous polyps in the colon. ... most skilled colonoscopists [lesions] in 40%..., but the least skilled found polyps in only 15% of those screened.

•*Early treatment:* Consider prostate cancer.... only very experienced surgeons actually achieve the low complication rates that all patients deserve. ... surgeons who have done 250 or more prostate surgeries are ... almost twice as good as those ...who have ... few operations ...(around 10 or so). ... In N.Y.S. in. 2002, the average prostate surgeon performed less than four operations....

•*Personalized, targeted treatments.* In breast cancer ... Herceptin ... the most important advances in personalized breast cancer treatment may be going to women it shouldn't, and not going to women it should. ..." *(Dr. Bach is a physician at Memorial Sloan-Kettering Cancer Center in New York City, and a member of the National Cancer Policy Forum of the Institute of Medicine...)*

(***At the risk of offending a slew of physicians and surgeons, your editor would confirm this on the basis of his personal experience and that of close family members. And that is why whenever possible he seeks the care of medical school faculties whenever and wherever he can.The signifcant error rate outside has been 100% The medical school is the only place in our medical system where some sort of quality control for doctors actually occurs and is effective. It is why when we chose our retirement location we limited ourselves to a place that is only 75 minutes from the University of Colorado's Medical School There are many excellent MDs in private practice well away from medical schools and there are some MDs in medical schools who are not the very best around, but since it is impossible to get real hard information on MD ability and quality as recommended here, take the easy way and seek out your nearest medical school***)

BUGS! from *The Wall Street Journal* February 5, 2008 by Shirley S. Wang. **New Tests Spot Infectious Bugs More Quickly.** "Hospitals...deploying a new breed of diagnostic tests - ones that promise results in hours not days and are particularly effective in detecting deadly antibiotic-resistant 'superbugs'...identifies organisms using **genetic information rather than growing them** in a dish and examining them under the microscope...[Faster] strain [and] resistance.

Trauma: ever been clobbered in the head?- could be a potent excuse for your failings.....

from *The Wall Street Journal* January 29, 2008 by Thomas M. Burton. **Hidden Trauma: Studies Cite Head Injuries As Factor in Some Social Ills. Brain researchers link mental woes, alcoholism to long-ago blows.** "... **providing therapy for an underlying brain injury often helps people with a variety of ills ranging from LEARNING DISABILITIES to chronic homelessness and alcoholism.** ... widely accepted. ...What's new is the contention... that there are many other cases where a severe past blow to the head, resulting in unconsciousness or confusion, is the unrecognized source of such problems. 'Unidentified traumatic brain injury is an unrecognized **major source of social and vocational failure.**... can include bike and car accidents, sports concussions such as those suffered by professional football players, and abuse and falls that can date back to childhood. ... 85% of common falls in

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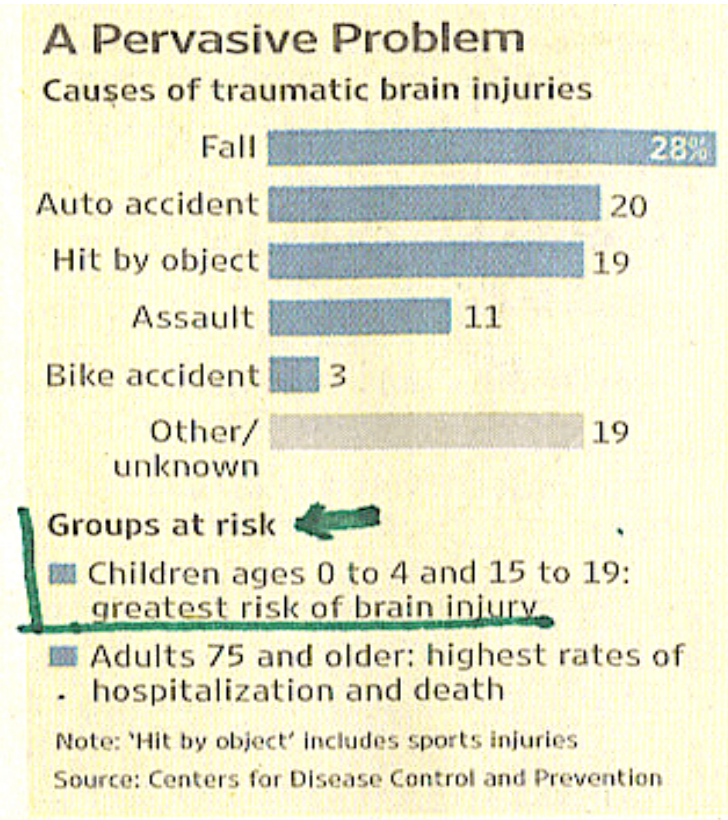
infancy don't produce long term deficits, but that some do.[15%] .[yes-]the homeless...: 82% had suffered brain injury in childhood, primarily [from] parental abuse. ...[yielding] more than twice the rate of depression and of alcohol and drug abuse... They also had sharply elevated rates of panic disorder, obsessive-compulsive disorder and suicide attempts. ... **how many pupils enrolled in programs for children with learning disabilities had ever suffered a hard blow to the head. The results were startling: About 50% had.** ...[often] lost in regular learning disabilities classrooms...trouble seeking care at a medical school ...teachers can assume they're not trying hard. ... They need more breaks ... performance varies ... and a teacher can also erroneously perceive this fluctuation as lack of initiative. ... 'learning disabilities or behavior problems there's often an underlying high percentage of children with traumatic brain injury. ...about 20%,'... centers for alcoholism and drug abuse. ... 54% had once suffered a hard blow to the head... About 70%...homeless people [are] in the 10th percentile or lower for memory, language or attention. ... 82% had a significant blow to the head prior to becoming homeless, usually from severe parental abuse during childhood. ..."



Money and Hospital$$$$

from *The Wall Street Journal* June 3, 2008 by Sarah Rubenstein. **Hospitals Put Patient's Debt Up for AUCTION. Collection agencies bid online for right to recoup funds; Worries about tougher tactics.** "... . Auctions can drive up the amount paid for debt meaning a collector must recoup more money from patients to cover its initial investment and turn a profit. ... winning bidders often get to keep all the money they collect on the auctioned debt. ... The federal Fair Debt Collection Practices Act ...govern(s) how debt collectors can (*mis)*treat consumers. ... aren't allowed to harass consumers or make false statements, including implying they will sue (if they don't intend to do so!). calling the medical provider or your insurer could help clarify any confusion about what you owe. The hospital also could provide information about financial assistance or charity-care. ..."

from *The Wall Street Journal* April 30, 2008 by Jacqueline Palank. **Many Hospitals on Brink of Insolvency, Study Finds.** "**More than half of U.S. hospitals** aren't seeing enough patients to provide sufficient revenue to fund operations and are 'teetering on the brink of insolvency' or already are insolvent, according to a study. ... [that is] more than 2000 of the nearly 3900 acute care hospitals... Nearly 750 hospitals that do turn a profit still don't have enough to reinvest in improvements or other essential expenditures. ...[more] are filing for bankruptcy ... a 'top tier' of about 500 to 1000 hospitals that are consistently profitable, have excellent credit ratings and claim a substantial share of the market ... then there's everybody else.

... many hospitals have too many beds and too few patients. ... 'Hospitals are also competing with same day surgery centers and outpatient clinics and all sorts of ways to deliver health care' ... While occupancy levels decline, the cost of care continues to rise. The rates of reimbursement from Medicare and Medicaid are down. ... Nor are hospitals immune to the credit crunch.. if they can get financing at all. .... more hospitals will have to seek drastic fixes ... mergers or bankruptcy filings ..."

from *The Wall Street Journal* April 28, 2008 by Barbara Martinez. **Cash Before Chemo: Hospitals Get Tough. Bad debts prompt change in billing: $105,000 (IN ADVANCE TO BE ADMITTED FOR TREATMENT).** "When Lisa Kelly learned she had leukemia in late 2006, her doctor advised her to seek urgent care at M.D. Anderson Cancer Center in Houston. But the non-profit hospital refused to accept Mrs. Kelly's limited insurance. It asked for **$105,000 in cash before it**

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would admit her.... M.D. Anderson [FINALLY] PROPOSED a certified check for $45,000.... Mr. Kelly arranged to borrow the money. ... After having blood drawn and a bone marrow biopsy, the hospital demanded an additional $60,000 on the spot.... The hospital eventually lowered its demand to $30,000. ...

After eight days, [Mrs. Kelly] emerged.. Chemotherapy... more than a year, as would requests for up front payments. At times, her [Rx] was 'blocked'. ... she [HAD] to go the business office first and make a payment. ... But she is still personally responsible for $145,155.65 in bills. ... the hospital offered Mrs. Kelly a 10% discount on her balance, but only if she pays [90%]$130,640.08 by this Wednesday April 30. ... The hospital has urged Mrs. Kelly to sell (HER)assets. ..."

An OSU study found net income per bed nearly tripled at non-profit hospitals to $146,273 in 2005 from $50,669 in 2000. According to the AHA, 77% of nonprofit hospitals are in the black, compared with 61% of for-profit hospitals. Non-profit hospitals are exempt from taxes and are supposed to channel the income they generate back into their operations. **Many have used their growing surpluses to reward their executives with rich pay packages, build new wings and accumulate large cash reserves.** .... Federal law requires hospitals to treat emergencies, such as heart attacks or injuries from accidents. But the law doesn't cover conditions that aren't **immediately life threatening**. ...

from *The Wall Street Journal* April 4, 2008 by John Carreyrou and Barbara Martinez. **Nonprofit Hospitals, Once for the Poor, Strike It Rich. With tax breaks, they outperform for-profit facilities.** "..

. **RIDING GAINS FROM INVESTMENT PORTFOLIOS** and enjoying ... a decade of mergers, the earnings... have soared.... income of the 50 largest nonprofit hospitals jumped [X8] to $4.27 billion ... 2001 [to] 2006, according to ... The American Hospital Directory.. The Cleveland Clinic swung from a loss to net income of $229 million... 25 nonprofit hospitals or hospital systems now earn more than $250 million a year. One... has a treasure chest of $7.4 billion -... 77% of the 2033 U.S. nonprofit hospitals are in the black,... just 61% of for-profit ... are profitable. ... **rich executive pay.** Flush with cash, Northwestern Memorial Hospital in Chicago (*MY ALMA MATER-ed*) has rebuilt its entire campus since 1999 $1 billion... a new women's hospital ...marble in the lobby, birthing rooms with [latest TVs], 1000 works of art and a roof topped with 10,000 square feet of gardens. In 2006, [NM's ex-CEO got],... a $16.4 million payout....

Hospitals and the Law

from *The Wall Street Journal* March 12, 2008 "Law" an AP report. **Hospitals Sue U.S. Officials Over Medicaid Regulations.** "... to block the enactment of regulations that some hospitals claim threaten their survival. The regulations **would restrict federal Medicaid payments so they don't exceed the [ACTUAL] cost of providing care**. ...would make it harder to offset the expense of treating the uninsured. **Hospitals with [more] patients with private insurance [*underinsured or not*] charge those patients more to offset health care for the indigent**. **Hospitals with a large percentage of poor patients [can't].**. They are reliant on Medicaid to make ends meet. ...

MEDICAL INSURANCE $$$$

from *The Wall Street Journal* February 14, 2008 by Vanessa Fuhrmans and Theo Francis. **Probe Targets Health Insurers on Payments. New York spotlights unit of UnitedHealth that sets out-of-network rates.** "... move takes aim at a common practice among health insurers that can result in higher medical bill payments for many consumers. While insurers typically pay in-network hospitals and physicians a negotiated fee for medical claims, out-of-network providers are reimbursed 'usual and customary' or 'reasonable' charges. These charges are set according to what insurers have determined is the going rate for a given procedure or service in a specific area. ... Doctors and hospitals have long complained that the methodology is opaque and sets reimbursement low. ... **UnitedHealth is at the center because it owns, through its unit Ingenix, the database that much of the rest of the industry uses to determine usual and customary charges.** Called the Prevailing Healthcare Charges System, the database contains price information from more than one billion medical claims collected from more than 100 health plans nationwide. Health insurers typically compare out-of-network claims against the data base and automatically reduce the bill to a 'reasonable' size before reimbursing the patient or doctor. Linda Lacewell, who heads Mr. Cuomo's health care industry task force, **characterized the Ingenix database as 'garbage in, garbage out' with insurers sometimes manipulating data and knocking out price information from doctors with higher charges.** ...."(***INSURERS ARE IN THE BUSINESS OF? !MAKING MONEY!, #1,#2,#3 AND THAT MEANS PAYING OUT AS LITTLE AS POSSIBLE (TO YOU and anyone else) BY WHATEVER MEANS*** and that is just what eactly they are doing!"doing their job for stockholders and employees, NOT their insurance customers. Any market Competition has been eliminated by intended OBFUSCATION!..)

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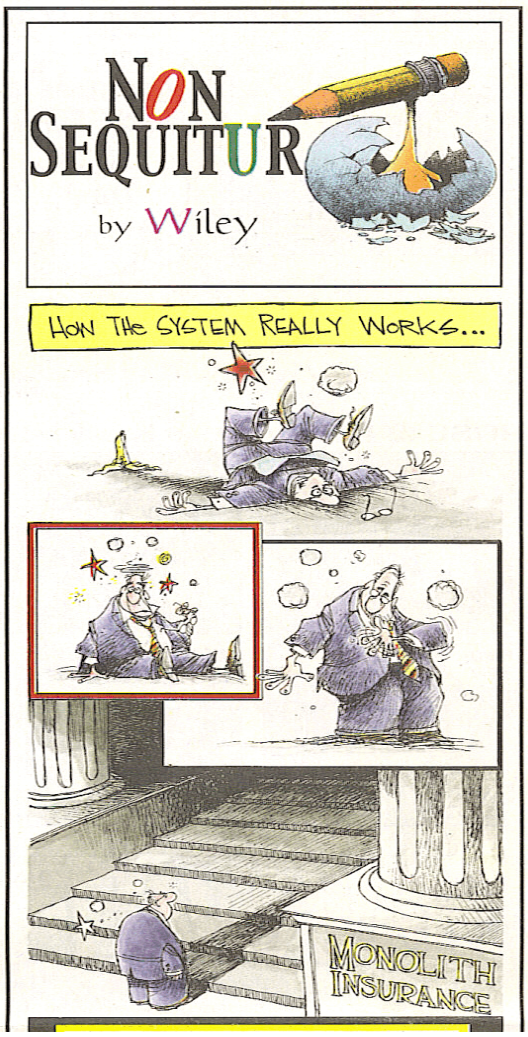
The Natural Conclusion:

from *The Wall Street Journal* April 14, 2008 by Jonathan Kellerman. **The Health Insurance Mafia. ALMOST EVERYONE WOULD BE BETTER OFF IF MOST PEOPLE PAID DOCTORS OUT OF [THEIR OWN] POCKET.** "Most discussions about the rising cost of health care emphasize the need to get more people insured. The assumption seems to be that insurance - rather than the service delivered by doctor to patient - is the important commodity. But perhaps the solution to much of what currently plagues us in health care - rising costs and bureaucracy, diminishing levels of service - rests on a radically different approach: *fewer* people insured. You don't need to be an economist to understand that **any middleman interposed between seller and buyer raises the price of a given service or product.** Some intermediaries justify this by providing benefits, such as salesmanship, advertising or transport. Others offer physical facilities, such as warehouses. A third group, organized crime, utilizes fear and intimidation to muscle its way into the provider-consumer chain, raking in hefty profits and bloating cost, without providing any benefit at all. **The health insurance model is closest to the parasitic relationship imposed by the Mafia and the like.** Insurance companies provide nothing other than an ambiguous, shifty notion of 'protection'. But even the Mafia doesn't stick its nose into the process; once the monthly skim is set ...When insurance companies insinuate themselves into the system, their first step is figuring out **how to increase the skim by harming the people they are allegedly protecting through reduced service.** Insurance is all about betting against negative consequences and **the insurance business model is unique in that profits depend upon goods and *services not* being provided.** Using actuarial tables, insurers place their bets. ...Health insurers have taken steps to avoid that level of surprise: Once they affix themselves to the host - in this case dual hosts, both doctor and patient- they systematically suck the lifeblood out of the supply chain with obstructive strategies. For that reason, the consequences of any insurance-based health care model, be it privately run, or a government entitlement, are painfully easily to predict. There will be progressively draconian rationing using denial of authorization and steadily rising co-payments on the patient end; massive paperwork and other bureaucratic hurdles, and steadily diminishing fee-recovery on the doctor end. ...

"But a hefty proportion of health care services - office visits, minor surgeries - would be affordable to most Americans if the slice of the health care dollar that currently ends up in the coffers of insurance companies was eliminated. ...Physicians and other providers need to liberate themselves from the Faustian bargain they've cut with the Mephistophelian suits who now run their professional lives. Because many doctors are loath to talk about money, they allowed themselves to perpetuate the fantasy that 'insurance is paying'. It isn't. There is no free lunch and no free physical exam. If substantial numbers of health care providers shook off the insurance monkey on their back, en masse, and the supply of providers was substantially increased by opening more medical schools, the results would be a more honest, cost-effective system benefitting everyone. Except the insurance. *(Dr. Kellerman, clinical professor of pediatrics and psychology at USC's Keck School of Medicine, is the author of numerous crime novels and three books on psychology. His latest novel is "Compulsion" (Ballantine, 2008)*)

Even a cartoonist seems to agree with this BAD opinion of insurance companies:



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Hyde Park Editorial

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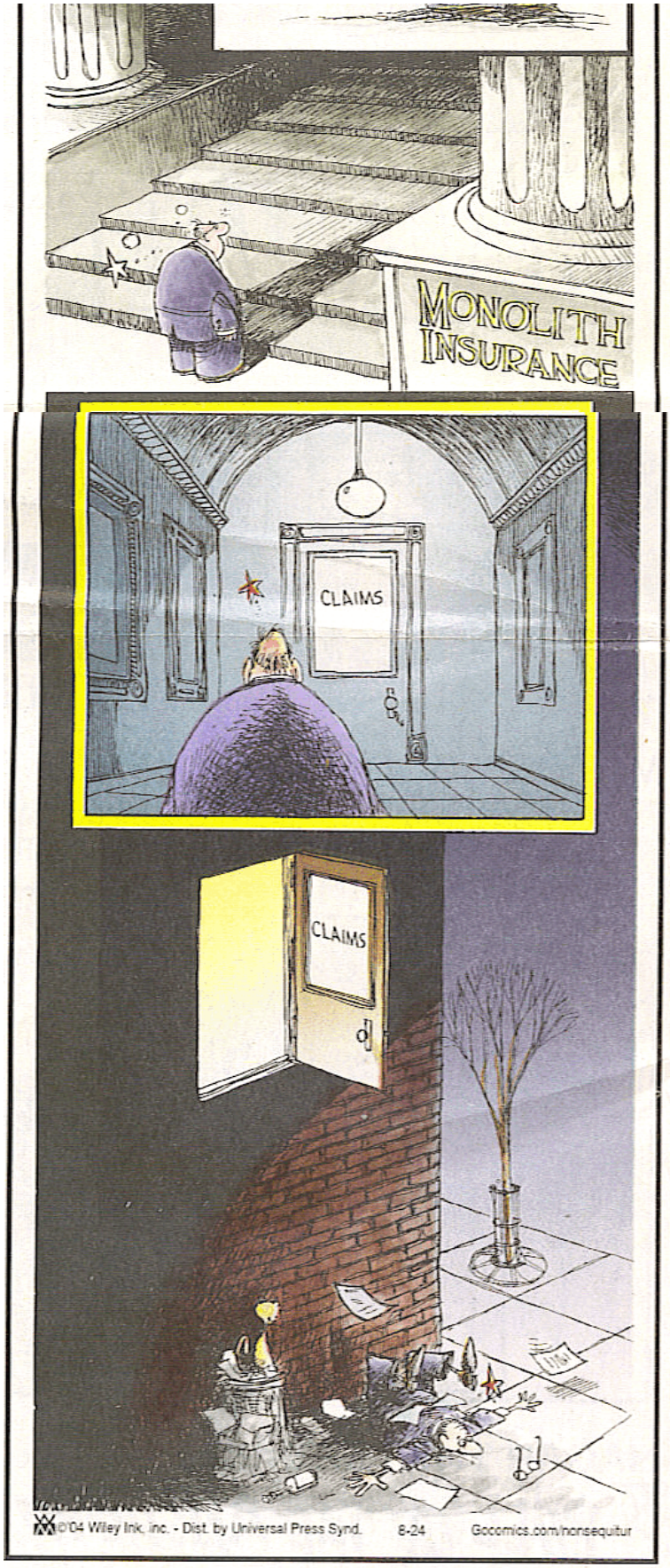

from *The Wall Street Journal* February 8, 2008 by Victoria C. Bunce and J.P. Wieske.. **Mandate Update: It's POLITICIANS who keep MAKING HEALTH INSURANCE MORE EXPENSIVE.** "To hear some of the presidential candidates, you'd think that health insurance companies are the driving force behind the growing cost of health insurance. The more likely culprits are our politicians and the laws they pass. ... A health insurance 'mandate' is a legislative requirement that an insurance company or health plan cover (or offer coverage for) common - but sometimes not so common - health care providers, benefits and patient populations. They include:

- Providers such as chiropractors (mandated in 46 states) and podiatrists (35 states), but also massage therapists (four states) and naturopaths (four states);

- Benefits such as mammograms (50 states) and drug abuse treatment (34 states), but also morbid obesity treatment (4 states) and wigs for cancer patients (10 states);

- Populations such as dependent students (30 states), but also grandchildren (4 states). ...

For almost every health care product or service, there are at least two groups that want insurance to cover it: those who sell the products and services ... And those who buy and use them. Both of these highly motivated groups push state legislators - and increasingly members of Congress - to require insurance to cover the care. As a result, government interference in and control of the health care system is steadily increasing - and so is the cost of health insurance. ... But the fact is that **mandates** almost always raise the cost of health insurance. That's because **mandates require insurers to pay for care that consumers previously funded out of their own pockets, if they purchased it at all**. ...

Another trend is the 'eligibility' mandates. Health insurance typically allows dependents to stay on a policy during their college years. But some states are increasing **dependent eligibility up to age 30**, regardless of student status....In addition, we are seeing new eligibility categories emerging, such as '**domestic partner', 'legal alien', 'elderly parent', 'grandchild'** and 'U.S. armed services personnel'. All of these are attempts to force insurers to cover people under someone else's existing polity. Such micromanaging of benefits is unique to health insurance. (*Ms. Bunce is research and policy director at the Council for Affordable Health Insurance. Mr. Wieske is director of state affairs at CAHI.)*

from *The Wall Street Journal* March 25, 2008 by Jane Zhang. **How Government Adds to Ranks of Uninsured. Many outsourced federal jobs don't offer**

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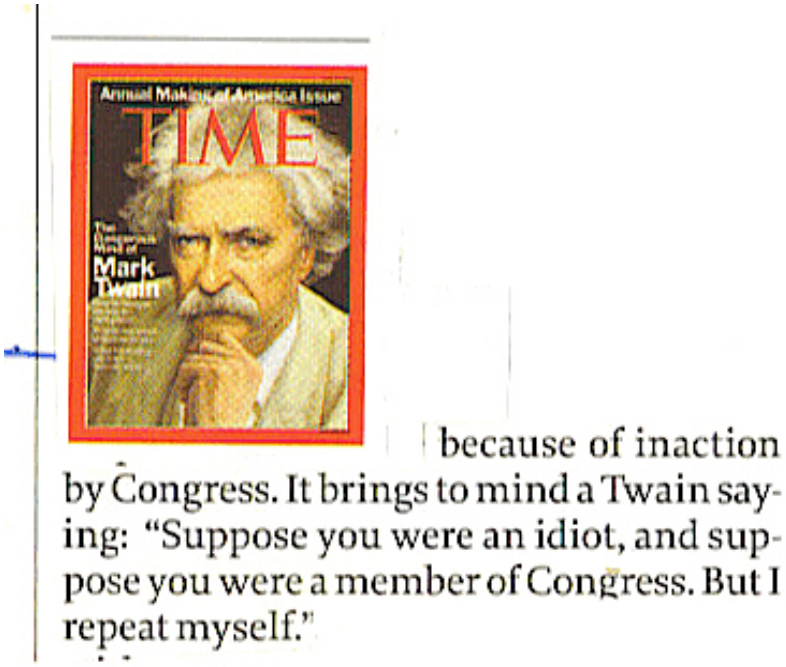
health insurance; Using [the substitute] cash allowance for rent. "... Covering the uninsured is a central issue in this year's political campaign. Yet while politicians debate how best to cover the growing ranks of the uninsured, the federal government - by outsourcing service jobs - quietly is adding to those numbers. 'As federal employees, we get great insurance' ... 'People who work as contractors often don't enjoy those benefits'. Federal contract employees, including cafeteria workers, security guards and cleaning crews, work on Capitol Hill and in federal agencies across the country. Under a 1965 law, called the McNamara-O'Hara Service Contract Act, most contractors with service contrasts of more than $2500 are required to pay locally prevailing wages, plus fringe benefits **or the cash equivalent - $3.16 an hour this year, [= $ 6300 a year]** under a government formula. Yet some contract employees don't get either the health insurance or the extra cash. Under the law, **employers in industries where health insurance typically isn't offered are exempt.** Other employers don't comply with the law because they don't understand it or assume they won't get caught, ... **The law doesn't allow contract workers to sue employers over alleged violations. ...**"



Health Savings Accounts (HSAs)

from *The Wall Street Journal* May 1, 2008 by M.P. McQueen. **HSA Users Find Hassles Amid Savings. Upfront medical expenses, paperwork surprise holders of high-deductible insurance.** "... High-deductible insurance plans paired with health savings accounts - so-called HSAs - ... HSA users were much wealthier than people covered by other types of plans. ... attractive to higher income people who are looking for tax shelters. ..."

Medicare

from *The Wall Street Journal* June 20, 2008 by Jane Zhang. **Probe Finds Tax Abuse by Medicare Providers.** "... 27,000 doctors, hospitals, nursing homes and hospices, paid by Medicare failed to pay more than $2 billion in federal taxes in 2006. ... the total included $896 million in payroll taxes and $581 million in individual income taxes. ... the result of the third tax fraud probe involving health care providers. Last year, the GAO found 21,000 of Medicare's doctors and outpatient services owed $1 billion in taxes through September 2005, and 30,000 providers of Medicaid services, the state federal health care program for the poor, owed more than $1 billion through September 2006. Lawmakers have been pressing the Centers for Medicare and Medicaid services to adopt the Federal Payment Levy Program that would allow the Internal Revenue Service to withhold government payments to contractors that owe taxes. ... **The levy system allows the Internal Revenue Service to withhold ALL [Medicare] payments to providers who owe taxes until their debt is paid .** ..."

Some of these may even be Double Dippers: Fraudulently charging Medicare and then fraudulently, not declaring the income payments to the IRS! There has been much lately about Medicare fraud and there is a lot of it, but no wonder: 95% of Medicare claims are paid without out any real examination of the claim for validity That is so the government can say they spend so little on administration of Medicare, only 2-3% but insurance companies, working for profits spend 5 to 10 times as much checking claims and trying to NOT pay any claims or at least not any more money than they have to!...,

End of Medical sections!

$$$ Plain Money $$$

Looks like I will have to say my call for $1600 gold was wrong wrong. Its back now 20% to $800 just half that $1600 price.Yes we got killed in the recent kommodity krash and kollapse like many others....

In fact right now, we are so gloomy about the stock market we are purchasing one annuity that promises a guaranteed 100% return in ten years if you just leave it invested there, regardless of your investing results

We have withstood now two decades of investing where we made zilch. The 1970's and this last decade. So a guarantee of 10% a year for up to ten years at zero risk is looking awfully good to us right now....

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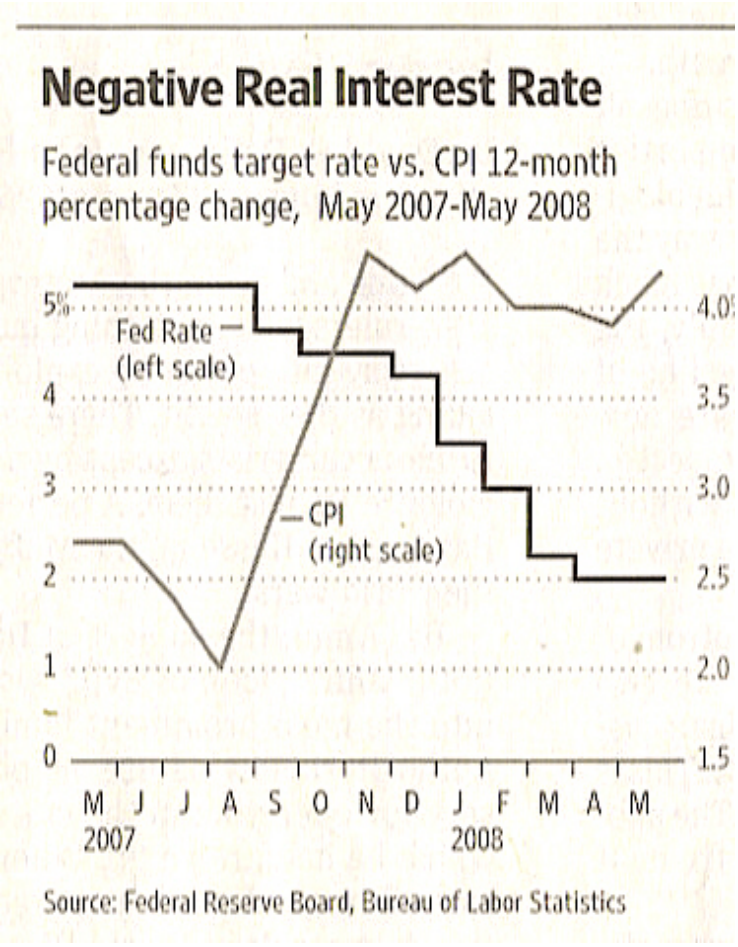
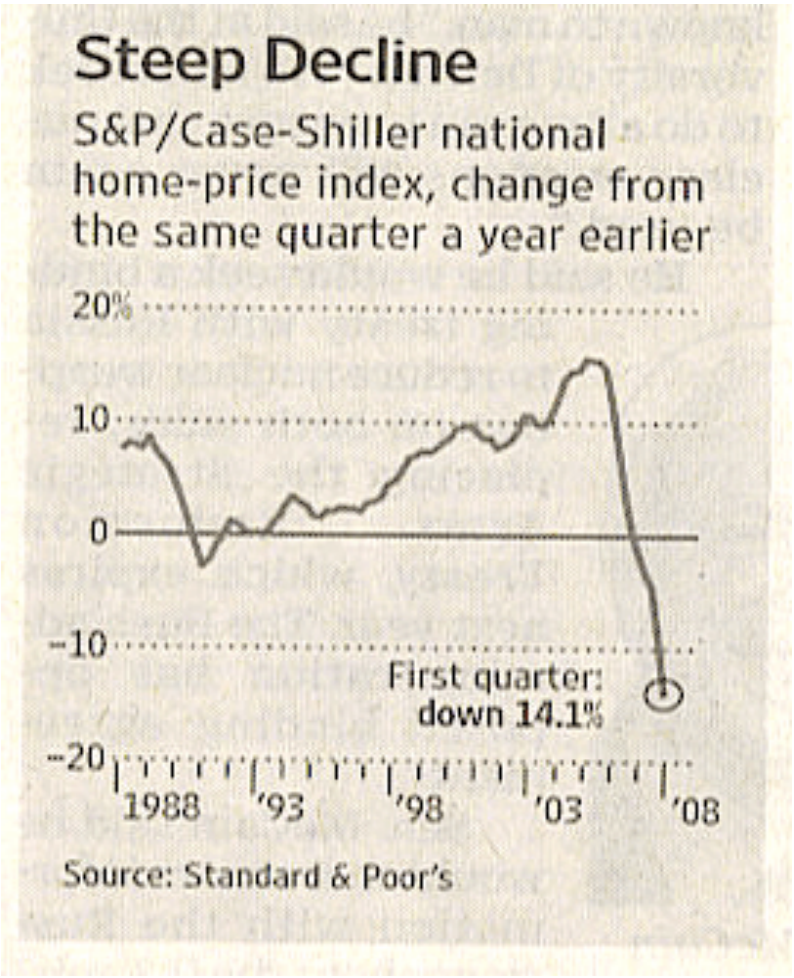
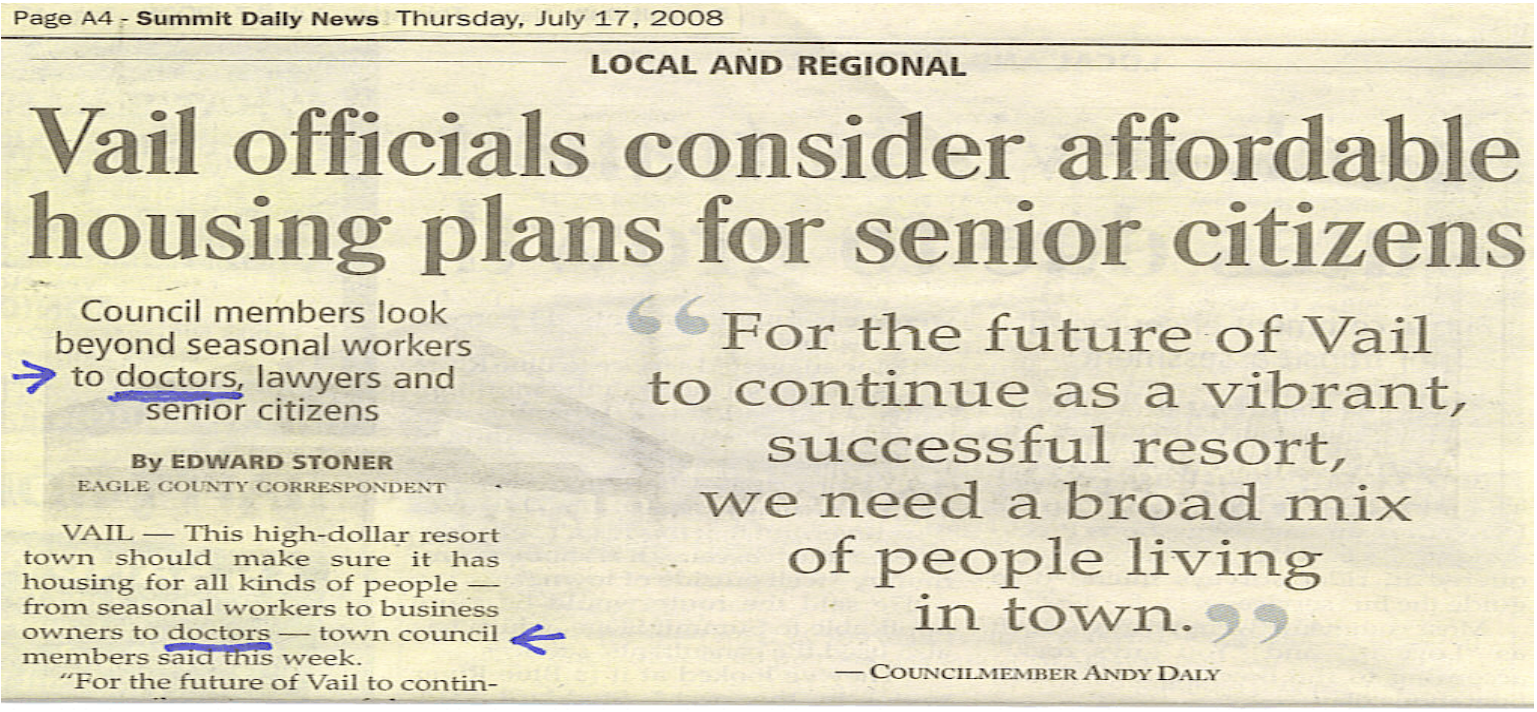
Here's One reason why things are bad right now and that 10% reutrn looks so good>How can you make money in this sort of environment on top of all the other horrors around right now!That of course includes Housing and the MortgageMarkets..... Like this:





*There is some good news from Vail for you doctors: (Remember **BV&SQ** 23(1) Q1 2008 p.63?)*


Page A4 - **Summit Daily News** Thursday, July 17, 2008

LOCAL AND REGIONAL

Vail officials consider affordable housing plans for senior citizens

Council members look beyond seasonal workers to doctors, lawyers and senior citizens

By EDWARD STONER
EAGLE COUNTY CORRESPONDENT

VAIL — This high-dollar resort town should make sure it has housing for all kinds of people — from seasonal workers to business owners to doctors — town council members said this week.

"For the future of Vail to contin-

"For the future of Vail to continue as a vibrant, successful resort, we need a broad mix of people living in town."

— COUNCILMEMBER ANDY DALY

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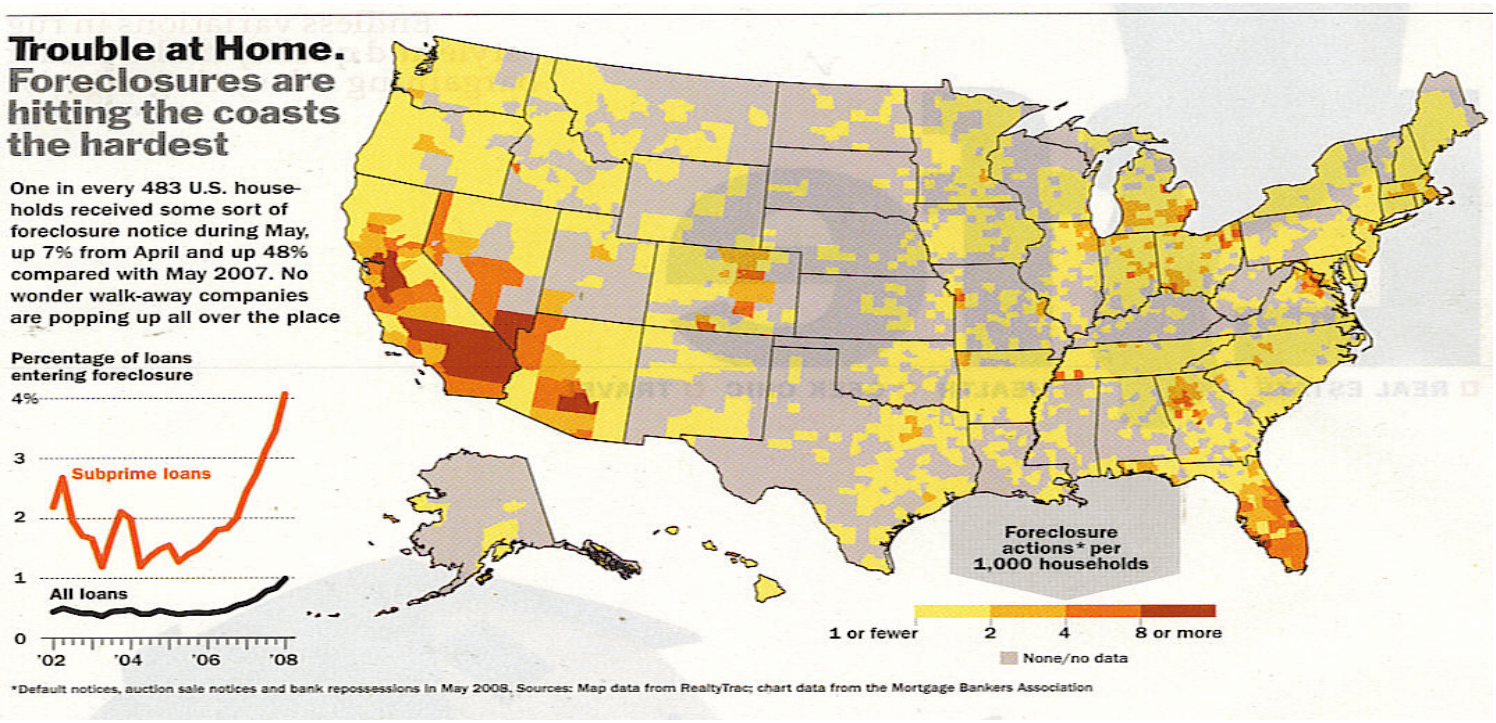
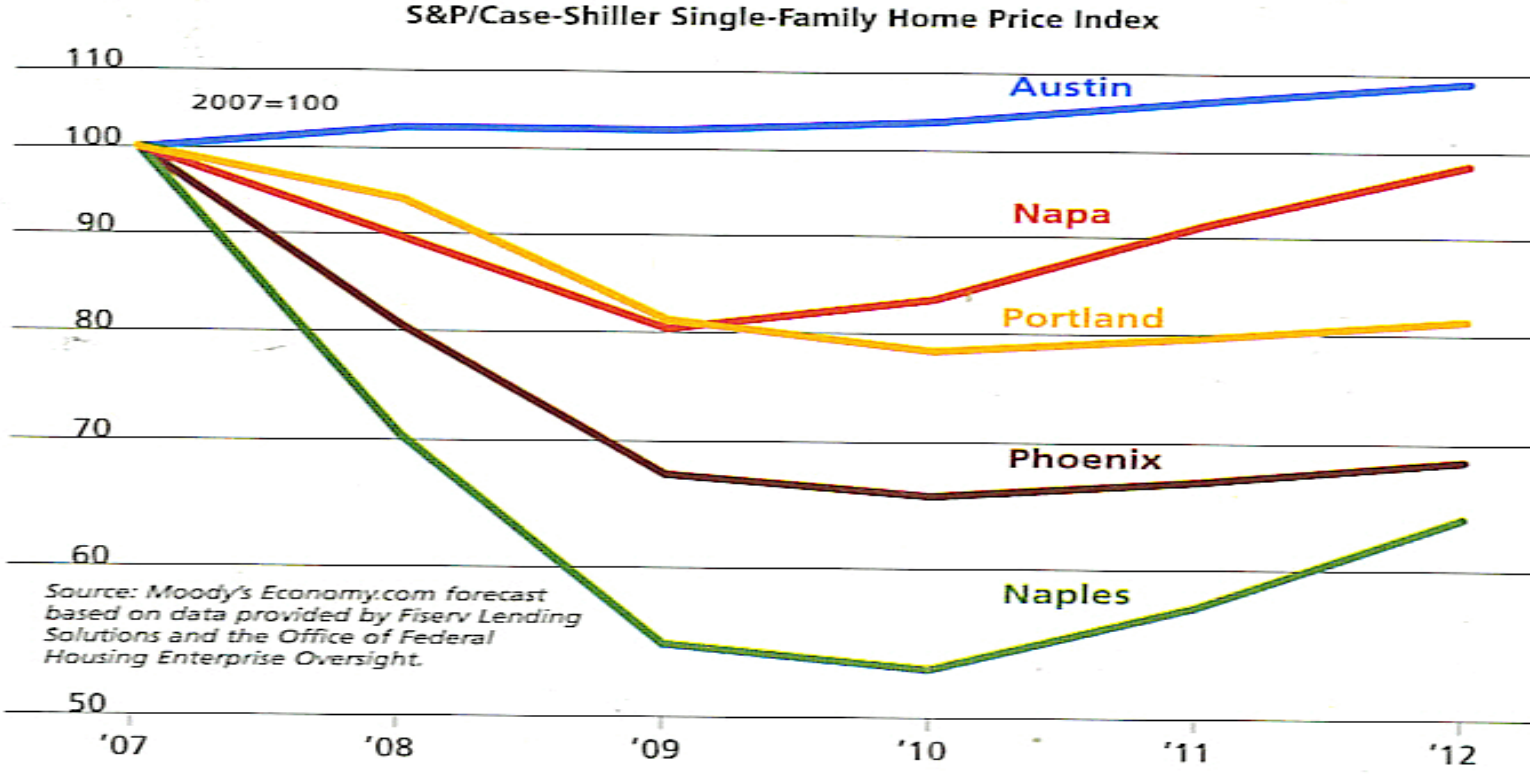


*Here;s advice on housing (see chart) when you should think of buying depends on where you live! Jim Cramer today *26 August predicts a final housing bottom for the whole economy for the third quarter of* ***2009,***



Market Timing

When should you buy that second home? Based on predictions by Moody's Economy.com, this looks like a good year to begin bargain-hunting in the Napa Valley. Wait to buy in Austin and you might pay more. But it's too early to go shopping in Naples or Phoenix, where prices are nowhere near bottom.

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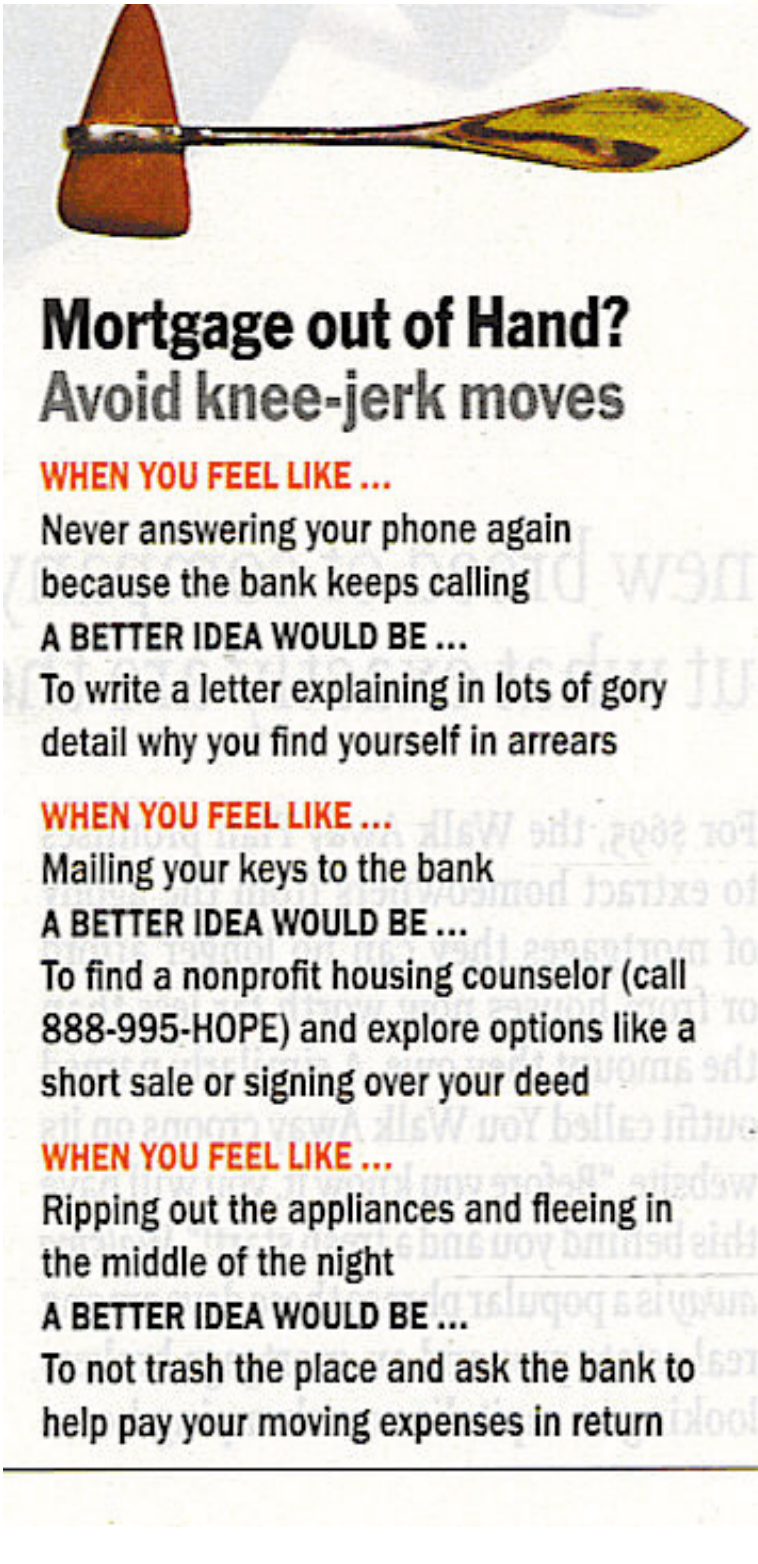
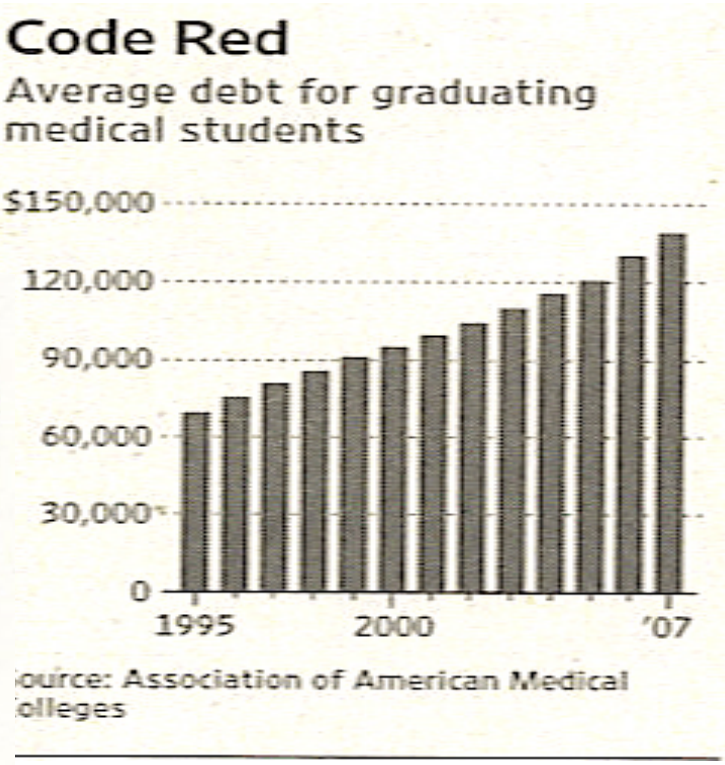
specifically June 30, 2009 but Not NOW, its only 2008*; NOT YET -that coincides roughly with the info in this chart:Other current opinions are that housing prices still have another* ***15% to drop*** *before the bottom. In our resort neighborhood, sales of homes have come to a screeching halt. One realtor friend is selling her stock to live off. Three houses in the neighborhood have been taken off the market so the owners can rent them for the coming winter season. -Ed.*

MeAVING $$$$$





The Inflation in the above chart is 100%+ in 12years,= 8%+/yr., more than twice the rate of inflation for the CPI or PPI, and almost as much as the increase in medical COSTS over the same period **!!!**

Tuition-Free Medical School!!!

from *The Wall Street Journal* May 15, 2008 by Shirley S. Wang. **Cleveland Clinic's Medical School To Offer Tuition-Free Education. Move seeks to spur students' interest in academic careers.** "The medical school run by the Cleveland Clinic will offer a tuition-free education, in the hope that a substantial reduction of post-graduation debt will encourage top students to enter academic medicine. ... the high cost of a medical education - newly minted doctors owe nearly $140,000 on average - influences students' career choices. One-third of medical students surveyed by the nonprofit Association of the American Medical Colleges say debt influences their choice of specialization. In clinical practice, family medicine doctors in 2006-07 earned an average of $161,000 a year, radiologists earned $380,000 and orthopedic surgeons $413,000, according to Merritt, Hawkins & Associates, a health care search and consulting firm. In the academic arena, median base compensation for family practice is $140,038, orthopedic surgery $205,904 and radiology $272,737, according to

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the Medical Group Management Association, a professional membership association for group practice managers. Interest in academic medicine has been relatively flat for about a decade, hovering around 15%, according to a yearly survey of incoming students. That number fell to 9.4% in 2007 for reasons that are unclear.

"The Cleveland Clinic Lerner College of Medicine of Case Western University ... all incoming students will be awarded full scholarships to cover their estimated $43,500 tuition. Students will still have to pay for living expenses, which the school estimates will be around $21,800 including all fees, equipment and books. ... will require no career commitment or repayment if graduates quit or choose to practice in a clinical setting. The school's goal is to train physician investigators who teach and conduct research on topics such as new treatments. ... The five year program - typical medical programs take four years - incorporates research throughout, and becoming tuition free was always part of its mission. ... The school had more than 1000 applications for its slots last year, and while the prospect of paying no tuition might attract more top-tier applications ... While Lerner is the first medical school of the U.S. to forgo tuition for all students, other schools also are working to ease the financial burden. The University of Central Florida, which is establishing a medical school, announced in April that it will offer scholarships to its first class covering tuition and expenses. Yale University and some others are increasing financial aid. *[In 1955, over a half century ago, your Editor, by taking a written exam, won a full tuition N.Y.S. scholarship to (any) medical school. It paid $1300 a year. His father paid the tuition and gave him the money. He used it to buy his first sports car, a 1956 MGA for $1700.]*

Life and Living: Your Mind

from *The Wall Street Journal* July 18, 2008 by Steven Zeitchik. **Technology Gets Personal. Can algorithms predict our TASTES in movies and books?.** "but the idyll it imagined: - in which a computer anticipates and satisfies our every desire - has become arguably one of intelligent computing's most ambitious goals today (even if, as a number of these initiatives show, the path to that goal is more slippery and complex than any mid century futurist could have imagined.) Computer-aided personalization has [is already here]: ... recording services regularly learn our preferences based on what we record and then start recording for us. Fill out a personality survey for eHarmony.com and the computer will quantify your data, subject them to algorithms and then spit back your ideal mate (or at least [the nameof another] paying user who comes closest)....Driving a car? The lab's Car Coach system will use hundreds of sensors and data points to anticipate that wide left turn you're about to make, warn you about it before you make it and even correct, often in advance, other mechanics of your driving. Want the microwave to turns itself on before you've even come near it? .. Smart Kitchen uses sensors and probability formulas to program the microwave even as you're still pulling that TV dinner out of the freezer.

"Marketers have been doing a low-tech version of this for years, of course, using focus groups and surveys to extrapolate general appetites. But they've never [before] tailored their efforts specifically to the individual, and, more important, they've never used such sophisticated methods[to do so. They use]. esoteric stuff like regression trees and support vector machines to figure out what we want before we want it.... for the past two years, Netflix has offered a $1 million prize to anyone who could improve the success rate of its film recommendations to customers by a factor of 10%. ...[but] The quality of the results in these technologies often don't match the sophistication of the effort. TiVo, ... yielded the phenomenon of 'My TiVo Thinks I'm Gay',...=misinterpreted user preferences. ...

"[fact is] that we often don't know what we want until after we get it. ... Can technology improve to the point that listening to computer recommendations instead of to friends and critics will make us, on the whole, happier with our choices? Scientists are divided .... While some feel algorithms can still be substantially improved, leading to vastly higher rates of accuracy, there's a popular school of thought that says that the data,... have already been [taken, used, and] depleted,.. likely to yield little benefit. ..., many of us will still opt for the old-fashioned way. But sometimes it's even nicer to listen to a person we know we like.[than a computer] (*Mr. Zeitchik is a senior writer at the Hollywood Reporter and editor of the Risky Biz film blog.*)

SHOOT FROM THE HIP! MENTALLY!From *The Wall Street Journal* June 27, 2008, 'Science Journal' by Robert Lee Hotz. **Get Out of Your Own Way. Studies show the value of NOT OVER-THINKING a decision.** "... researchers now can detect our intentions and predict our choices before we are aware of them ourselves. [Your] brain, they have found, appears to **make up its mind 10 seconds before we become conscious** of a decision. ... [our] synapses and neurons ...work in concert to perceive the world around them, to learn from their perceptions, to remember important experiences, to plan ahead, and to decide and act on incomplete information. In a rudimentary way, they predetermine our choices. ...

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About 70% of the time, the researchers could also predict which button the student would push. ... And when those networks momentarily malfunction, people do make mistakes. performing routine tasks and discovered neural static - waves of disruptive signals - preceded an error by up to 30 seconds. 'Thirty seconds is a long time'. ...

The findings lend credence to researchers who argue that many important decisions may be best made by going with our gut - not by thinking about them too much. ... **people struggling to make relatively complicated consumer choices - which car to buy, apartment to rent or vacation to take - appeared to make sounder decisions when they were distracted and unable to focus consciously on the problem. Moreover, the more factors to be considered in a decision the more likely the unconscious brain handled it all better ... The idea that conscious deliberation before making a decision is always good is simply one of those illusions consciousness creates for us.** ..."

Brain Boosters

from *The Wall Street Journal* June 3, 2008 "Health Journal" by Melinda Beck. **'Neurobic's and Other Brain Boosters.** "... ... what scientists do know now that they didn't just a decade ago is that people generate **new** brain cells, and new connections between them, throughout life. And the more mental reserves people build up, experts believe, the better they can stave off age-related cognitive decline. ... P. Murali Doraiswamy, ... co-author of a new book "The Alzheimer's Action Plan", which outlines a host of ways to keep even normal brains spry. **Mental stimulation is one key. The more you challenge your brain, the more new nerve pathways you form.** A mini-industry of brain teasers, puzzles and computer games has sprung up to help worried baby boomers do just that. But you can give your brain a good workout with just a few modifications in your daily life. Some of the niftiest are '**neurobics**' - [Katz] for engaging different parts of the brain to do familiar tasks. Try brushing your teeth or dialing the phone with **[use] your non-dominant hand**. ... involving more of your senses in everyday activities - such as showering or eating dinner with your **eyes closed.** 'The brain loves **novelty**'. ... Stress has the opposite effect. ..depresses the growth of nerve cells and the connections between them. **Yoga, meditation, exercise and social interaction** can all help alleviate it. Getting **sufficient sleep** is also crucial. ... Untreated sleep apnea can be very detrimental to memory; age-related declines in testosterone and estrogen also interfere with sleep. ... what is good for your heart is good for your head and vice versa. ... **abdominal fat - all raise the risk for age-related cognitive decline, as does smoking and heavy drinking. ... Exercise is emerging as an extremely valuable way to enhance brain health. ... even 30 minutes of brisk walking daily** can improve blood flow to the brain.. ..." (*Email: healthjournal@wsj.com)*

Brain Busters

Warning ! **Blondes**!

from *The Wall Street Journal* November 19, 2007 from *The Sunday Times (U.K.)* November 18, 2007. **Stereotypes. Blondes Might Be Smart, but THEY MAKE MEN DUMB.** "Men's mental performance drops in the presence of blonde women, apparently because of the [*chronic erroneous*] perceived link of dumbness with blondness, Britain's Sunday Times newspaper reports. ...Journal of Experimental Psychology found that **men's scores fell in tests after they had been shown a picture of a fair-headed woman**. ... [distraction etc.] ruled out ... Instead, the subjects 'mimic the unconscious stereotype of the dumb blonde,'[?*empathetic mirroring?*] ... The study adds to a body of research of how stereotypes affect peoples' behavior. Other similar research has shown people walk and talk more slowly in front of the elderly."

Getting A Head

from *The Wall Street Journal* March 11, 2008 "Cubicle Culture" by Jared Sandberg. **Another Meeting? Good, Another Chance to Hear Myself Talk.** "Ask anyone what they like about meetings and they'll tell you instead why they hate them. ... **why, if everybody hates meetings so much, do we have so many of them?** We are, by nature, needy huddlers and cuddlers. The same person who disparages meetings - an exercise as easy as shooting fish in a barrel - sometimes secretly thinks they can be productive, can be a totem of **status** or, at the very least, can be a great forum for the latest joke material. They can also change the day's tempo - if only by introducing cinnamon buns. ...The disparity between public distaste toward meetings and private affection is likely due to the stigma attached to admitting you like them. It's declaring yourself either a showoff or a sheep - and definitely a time-waster. ... It takes a brave soul ... 'I feed off the energy produced when eyes meet and laughter is heard, and the electricity generated when an idea is universally accepted, especially when it is my idea' he says. Plus, I love to talk, be seen and be heard.' Just talking about a meeting - even if it's a gripe - signals you rated an invitation in the first place. It's another way to show **how important you are**'. ... **The drive for social connection is a very strong one**. ... sitting in a cubicle is 'stupefying' and isolating, only intensifying a social need.

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David Mazel, a research analysis, thinks people like meetings because **you can stay busy without accomplishing a thing**. He says 'having gone to the meeting is [=*acceptable "work"*]'. ... Meetings actually are **better than work** ... Meetings are held because, **while people detest them, they hate actually working more**. ... (Email at Jared.Sandberg@wsj.com. For discussion on today's column go to WSJ.com/Forums)

Flattery

from *BusinessWeek* August 13, 2007 by Nanette Byrnes. **The Boardroom. Profiles in Sycophancy.** Flattery will get you everywhere, including on the boards of some publicly held companies.... the major finding of a study of 760 outside directors published in...*Academy of Management Journal.* ... the most frequent flatterers, it turned out, got the most seats on other boards -. 'Ingratiation had the strongest effect,'...it outranked advice and counsel as an influence.

For You?ALTERNATE CAREERS

Be a MERCENARY!!

from CNBC early August2008 - an interview with the chief of Blackwater, the mercenary organization that has been a big part of our success in Iraq and Afghanistan. Their soldiers are a variety of professionally trained gun slingers who get **$ 550 a day for everyday they are in the theater. That's $ 200,000 a year and its tax free.** Of course there is some risk to your life and body but it is not too bad. Most of these volunteers may have been exposed to worse risk in their previous jobs and the pay is a lot better. *Our local police officers only make about $ 60,000 a year. except for those on special Denver Water Board duty watching the dam that holds back the five by five miles Dillon reservoir. They get $ 42 an hour for sitting in their patrol cars. That's almost as much as Blackwater mercenaries for a really cushy job!* (*We had zero guards and dam security for the first eight years since 9-11. Now they closed the dam road, an essential local road full time! Our civil guardians! That was in violation of a number of state and federal safety laws so they had to give in a bit. All trucks and late night traffic are still forbidden!*)***But maybe there's reason to hope. Don't quit yet:***

from *The Wall Street Journal* April 29, 2008 by Jacob Goldstein. **As Doctors Get a Life, Strains Show. Quest for free time reshapes medicine; A team approach.** "U.S. medicine is in the middle of a cultural revolution, as young physicians intent on balancing work and family challenge the assumption that a doctor should be available to treat patients around the clock. ... In a 2006 survey conducted by physicians-staffing firm Merritt, Hawkins & Associates, 63 % of medical residents said the availability of free time was causing them 'a significant level of concern' as they entered the profession, up from 15% in 2001. At the same time, the attempt by new doctors to lead a less pressured work life is putting additional strain on America's health care system. Many are eschewing fields such as internal medicine, pediatrics and family medicine, choosing instead specialties that offer both high pay and more predictable work hours. In family medicine, for example, hundreds of medial residence position go unfilled every year. But competition for slots in dermatology residencies is fierce. ... it is no longer uncommon for women to have babies delivered by a doctor who has never treated them before. ... the old OB-GYN model doesn't always benefit patients - and that younger doctors' reluctance to be on call 24/7 may well be a good thing for both patient and practitioner. ... The term 'hospitalist' was coined in the 1990s to describe a new type of doctor who focuses on patients who are in the hospital. Today, there are more than 20,000 hospitalists in the U.S. ... many work set hours for a fixed salary. Their pay is often 15% to 20% higher than what primary care doctors make. The vast majority are generalists, but a growing number are trained in obstetrics and other fields. ... **There has been a sea change in how young physicians today balance professional responsibilities and personal needs** compared to their colleagues from a few decades ago. ... for some younger doctors, being on call - even on prescribed nights - is too much. ... some senior physicians gripe about the younger generation's scheduling boundaries - and complain that older doctors must often pick up the slack. It really gets on your nerves when you get these young guys coming and interviewing and they say 'I'm, not doing this, I'm not doing that' ... We have a bunch of guys in our 50s, he says, who handle most of the trauma and emergency calls. ... The shift was growing evident even five years ago. Between 1996 and 2003, the proportion of women graduating from U.S. medical schools who chose more 'controllable' lifestyles - specialties allowing them to dictate hours spent`on the job [has]- doubled. ..."

Maybe a different medical specialty holds more promise and satisfaction? (Although ophthalmology is sure hard to beat but pediatric ophthalmology could be more remunerative. The increasing popularity of single mom-hood is no help at all! - and ***ONE IN THREE PREGNANCIES NOW ARE TO SINGLE MOMS****! Can you survive over one third of your practice being Medicaid? OK, let's consider some more alternate careers...)*

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from *the Wall Street Journal* May 5, 2008 by Vanessa Fuhrmans. **Medical Specialties Hit By a Growing Pay Gap. Shortages develop in Endocrinology, Pediatric fields.** "... Over the next decade, roughly 140 of the country's remaining 400 neuro-ohthalmologists - specialists trained to detect and treat visual problems connected to the brain - will have reached retirement age, according to an analysis of the North American Neuro-Ophthalmology Society's membership roster. Yet only 20 medical residents have opted to enter the field in th past four years, according to the society. Why? 'The compensation just isn't there'. ... the median income of a neuro-ophthalmologist at a teaching hospital is $200,000, (*hmm- isn't that the same as a mercenary soldier who has no educational investment or loans!?-Ed*) according to the North American Neuro-Ophthalmology Society. That's a third less than most general ophthalmologists, who undergo less training but can see more patients and do more pricey procedures, in a given day. ... **endocrinologists, rheumatologists and pulmonologists - specialties that also don't involve performing many procedures - face acute shortages**. **Many of the severest deficits affect children**. ... there are fewer than 200 pediatric rheumatologists ..."

Consider becoming a "nocturnist" (shouldn't that be 'nocturnAList'?)

from *The Wall Street Journal* May 28, 2008 by Laura Landro. **Hospitals Move To Reduce Risk of Night Shift. 'Nocturnists' fight dangers patients face in off hours; doing double duty in the ICU.** "Hospitals are waking up to the fact that substandard care on nights and weekends is endangering patients - giving new meaning to the term 'graveyard shift'/.. Patients suffer higher rates of death, complications and medical errors when they are treated during thinly staffed off hours. ... Institutions ... are hiring physicians known as nocturnists, who work only night shifts. Some hospitals have begun staffing intensive care units round the clock with critical care specialists who do double duty coping with a crisis anywhere in the hospital. And new policies are being put in place to improve communications at the hand off between the day and night shifts. ... In a study published last month in the journal 'Circulation' of 62,814 heart attack patients, **more than half arrived off hours. And this group was 66% less likely than day time patients to get an angioplasty** - a critical procedure to open clogged arteries - within the 90 minute window recommended by the American Heart Association. ... As of last year, about 1200 hospitals had either a nocturnist or hospitalist sharing night coverage, compared with just 700 hospitals with such staffing arrangements in 2003. ... only about 6% of the nation's 22,000 hospitalists are nocturnists. ... nocturnists adds an extra cost, the benefits in what we save the hospital in terms of liability, and the goodwill we create with specialists who don't have to come in at night, are endless'. ... Teaching hospitals have long relied on medical residents and interns for overnight duty. But **changes in work rules in recent years have forced them to reduce the number of hours medical trainees can work.** ... The risks of seeking after hour care are well documented. Recent studies show night death rates for patients who arrive at the hospital with strokes after hours. This is also the case for patients who have a cardiac arrest at night when they are already in the hospital. ... rates of complications are significantly higher on weekends for surgeries including vascular procedures and obstetrical trauma during cesarean sections. ...

"Failures"

To encourage you in difficult times, here are some examples of persistence

From *The Wall Street Journal* April 29, 2008 "Health Journal" by Melinda Beck. **If at First You Don't Succeed, You're in Excellent Company.**

Julie Andrews: "... a screen test when she was 12 years old....'She's not photogenic enough for film'...

J.K. Rowling's book about a boy wizard was rejected by 12 publishers. ...

The Beatles were turned down by Decca Records ... ' We don't like their sound' ...

Walt Disney was fired by a newspaper editor who said he 'lacked imagination' ...

Michael Jordan was cut from his high school varsity basketball team sophomore year. ...

Steve Jobs and Steve Wozniak were rebuffed by Atari Inc. And Hewlett-Packard co when they tried to sell an early Apple computer.

Thomas Edison took 1000 tries before he invented the light bulb. ...

What if **Dr. Seuss** had given up after his 27th rejection and not tried once more?

(View a slide show of other famous failures at WSJ.com. Email healthjournal@wsj.com)

If you are happy with your work but need more income to pay off your or your children's student loans, etc, then just add DISPENSING to your services and sell those expensive name designer fashion frames to the parents of your patients (see foregoing piece under Vision and Seeing, pages 170-171). There seem to be so many celebrity young moms and celebrity young parents out there these days, maybe there is some hope

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(financially) for pediatrics and pediatric subspecialties...

If you are happy with your work and your income but not with your home life, then become a workaholic:

Workaholism

from *The Wall Street Journal* 2008, by Jim Sollisch. **The JOYS of Workaholism.** " I recently had a bout of workaholism. Let's call it an episode. I binged on work for about four months. ... I have always looked down on people who are addicted to work. As a group they don't admit to being happy. ... but they've never seemed wholly convincing to me in their unhappiness. And now I know **their secret**. **They're not unhappy at all**. They've discovered a way to reduce one of the most stressful aspects of modern life: having to make a seemingly unlimited number of choices. ... unlimited choice produces genuine suffering. The more choices we have to make, the less certainty we seem to have. ,]... 285 kinds of cookies to choose from.... When faced with seemingly unlimited choices that have significant consequences like which stocks to invest in, which career to pursue or even which person to marry, many people become what Professor Schwartz calls 'maximizers': people who relentlessly search for the best option. These people spend a great deal of time and energy on choices that will never satisfy them. Workaholics are choosing to spend less time making choices by choosing to work so much. ... During my work binge, I avoided considering hundreds of choices each day

. ..."As a binge worker, I was too busy to cook dinner most nights. So my wife would buy prepared food, thus saving me the agony of hundreds of choices. Romaine or arugula? Organic or regular? Beef, chicken or pork? What about lamb? Chops or group? Pasta or rice? And the basmati or jasmine ... My wife also took over the social calendar. Deciding what movie to go to can take me most of a Saturday. But fortunately in my new life as an IMPORTANT PERSON, I had to work on Saturday, and when I got home, my wife had already chosen the movie. ... to buy an IPod, an act which leads to an almost infinite number of decisions,.... I dodged that bullet, remaining iPodless. ... Being too busy to read, I was freed from the heart rending decision ... which book to spend the next month with. In fact, now...I find myself getting anxious. Questions big and small about. What's for dinner? What's the purpose of my life? Thank God, I have to get back to work. (*Mr. Sollisch is a creative director at an ad agency in Cleveland.*)

Another Route to Happiness

from *The Wall Street Journal* April 2, 2008 by Jonathan Clements. **Down the Tube: The Sad Stats on Happiness, Money and TV.** "...engaging leisure and spiritual activities, things like visiting friends, exercising, attending church, listening to music, sighing, reading a book, sitting in a café or going to a party. When we spend time on our favorite of these activities, we're typically happy, engrossed and not especially stressed. These are **things you choose to do, rather than have to do**. ... we've missed a huge chance to do just that - which may help to explain why Americans are little or no happier than they were four decades ago. ... Instead, there's been a significant increase in the hours devoted to ... '**neutral downtime,' which is mostly watching television**. Women now spend 15% of their waking hours staring at the tube, while men devote 17%. Watching TV may be low stress and moderately enjoyable. But people aren't mentally engaged the way they are when they're, say, exercising or socializing. ... people would feel better about their lives if they spent their leisure time doing something that was more interactive and more engaging."(***SO TO BE HAPPY AVOID TV*** *!!!! DO ANYTHING ELSE!*

PUBLIC SAFETY

Driving *and drinking*

warning! If you must drink alcohol and drive, you are impaired and stimulants may only make your impairment WORSE. They will not counteract your drug impairment !!!!

Participants who had consumed caffeine with their alcohol thought they were less impaired than they really were

from TIME July 28, 2008 by John Cloud. **Will Caffeinated Alcohol be the Next Teen Drinking Fad?** "Let's begin... Irish coffee is brilliant: no sensible person can argue with caffeine and whiskey topped with cream and served in a warm mug. Irish coffee has been [around for a long time] ... so it's surprising that it took so long for the alcohol industry to come up with a canned version of caffeinated booze called **alcoholic energy drinks**. ... they carry teen friendly names such as sparks, four maXed and Joose. ... But [they] are much more dangerous than regular alcopops like Mike's.. First of all, they contain an assortment of stimulants - mainly caffeine but also ingredients like guarana and taurine that can speed the central nervous system and mask alcohol's effects. And they have more booze than other single serving beverages.

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Budweiser and Mike's are ... 5% alcohol; by comparison, Sparks Plus is 7%, and four maXed and Joose are about 10%. The... combination of a depressant (alcohol) and various stimulants carries a certain nightclub logic. ... But public health and law enforcement officials - who have mounted an aggressive campaign against alcoholic energy drinks - worry that drinkers will assume they'll be wired [stimulated] enough to drive home after a long night of consuming... **but caffeine makes you feel only 'wide-awake drunk'** as researchers have put it, not actually less impaired.

..."Does caffeine counteract the effects of alcohol? Or does it make drinking even more dangerous? Researchers have consistently found that caffeine won't keep you from getting drunk. In fact, from a psychological perspective, **drinking caffeine with your alcohol is much riskier than drinking alcohol alone.** One of the fascinating things about how humans process alcohol is that we have at least some capacity to overcome its effects by sheer force of will. ... study volunteers who are warned that an alcoholic drink will highly impair their performance on a psychomotor test actually do better on the test than people who are given the same drink but no information about impairment. In other words, at least in a lab setting, those who are [told] they're about to get truly blotto end up not letting themselves get so blotto. They don't perform as well as sober people, but they perform a lot better than the [unwarned] average drinker. [this] research implies that mixing stimulants in alcoholic beverages sends a dangerous message: Don't worry, the stimulants will protect you. [But] **people who expected caffeine in their booze to do the compensating work for them scored significantly worse on psychomotor tests than did a group told that caffeine would have no effect.** The latter group controlled themselves more. ...people who consumed energy drinks with alcohol ... also perceived their motor coordination to be better - even though it wasn't. Alcoholic energy drinks are a crime against taste - but worse, they trick your brain into believing you're not as drunk as you are. Bottom line: have a [*plain*] real beer instead. If your beverage of choice carries a silly name like Joose, you're probably too young to drink anyway." (*With reporting by Kimerley McLeod*) [*I have tried this myself more than once and agree- you can't counteract the psychomotor impairment or CNS and psychological DEPRESSION of alcohol with coffee. The only benefit of coffee might be- if you stop drinking alcohol to drink coffee:,- the* ***sobering time*** *it takes to drink the coffee! So if you must, drink your coffee very very very slowly... -Ed*]

Here's another warning, closely related. !! after all, we often are both drunk and sleepy, no?!

From *The Wall Street Journal* February 5, 2008, "Health Journal" by Melinda Beck. **ASLEEP at the Wheel: Waking Up to the Risks of Drowsy Driving.** "... Lack of sleep is a factor in **one-fifth** of motor vehicle accidents and near accidents. ... It's also to blame in **one-third of fatal truck accidents - equivalent to alcohol and drugs combined.** ... Averaging four hours of sleep for five nights builds the same level of cognitive impairment as being awake for 24 hours - **the equivalent of legal drunkenness**. ... Having **one beer in that condition, he notes, has the impact of a six pack**. ... More than **half of sleep-related crashes are caused by drivers under 25.** Teens need more sleep than adults, due to brain and hormonal changes, but they often get much less, between homework, activities and delayed sleep rhythms, and school days that start early. ... It's often high achievers who are vulnerable to sleep-related accidents. ... Some auto makers are testing technologies that alert drivers if their **eye movements suggest drowsiness** or if a car seems out of control. ... Opening the window or turning on the radio have very limited effect, studies have shown. Often, the more you fight the urge to sleep, the stronger it becomes. 'The body's hemostatic drive for sleep can seize control involuntarily.' ... Caffeine can temporarily block the sleep receptors in the brain. **But pulling over for a 20 minute nap is more effective.** ..." *(Email healthjournal@wsj.com and join a discussion on drowsy driving at WSJ.com/Forums)(I can confirm experience here too! -Ed)*

Still More Hazards of Wheeled Teenagers

from *The Wall Street Journal* November 30, 2007, "Science Journal" by Robert Lee Hotz. **Teenage Brains Seem Set for Recklessness, Yet Tend to Avoid Risk.** "The largest numbers of adolescents in history is coming of age world-wide. All told, some 1.2 billion people - one person in five - are between ages 10 and 19. ... These also are ... years of heedless high-risk behavior when social pressure and thrill-seeking override common sense. ... a quarter... report binge drinking and **half report experimenting with [illegal] drug use**; when pathological gambling first takes hold; when car accidents are the leading cause of death; when **half of all new HIV infections occur,**... half of the 19 million...sexually transmitted diseases in the U.S.

...anatomical changes in the maturing brain could be one cause of so much reckless behavior,... the brain in adolescence is biologically attuned to chemical highs and lows in ways that can easily alter it for life.... the nerve fibers that connect them all also are changing into higher speed conduits. The systems that excite and inhibit behavior are in a unique state... the unfinished architecture of the young brain seems especially vulnerable to

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substance abuse and stress - more prone to addiction, more resistant to the treatment of withdrawal and more susceptible to relapse - than that of adults, studies ... suggest. Its heightened susceptibility to substance abuse, for example, may be a consequence of its greater learning capacity... more readily respond to any stimulation. 'Just as a teenager will do a much better job than an adult of picking up a language, they will also, sadly, do a better faster job of becoming addicted.' ... the ventral striatum, which normally responds to a reward or any new, unexpected stimulus, overreacts in teenagers. .... more quickly, more strongly, and is more attuned to the magnitude of a reward. That may be why teenagers seek experiences they find rewarding, even though they might also be [dangerous]..." *(Email at sciencejournal@wsj.com. For a discussion on today's column, go the Science Journal forum,)*

Teen driving is further restricted, appropriately, at least in California:

from *The Wall Street Journal* July 1, 2008 an Associated Press report. **California Laws Look to Keep Drivers Focused.** "A California state rule[now].. **prohibits** 16 and 17 years olds from using **any device to talk or text while driving** except in an emergency. ... Lawmakers in 33 states have introduced 127 bills related to driver distraction in this year alone. ... New York, Connecticut, New Jersey, and Utah ...**requiring hands-free use of cell phones.** Washington ...driving with a cell phone to their ear ... $20 for the first ticket and $50 for subsequent tickers, ...fees that will more than triple the fine. ..."(*Maybe the police officer can only tell from the outside that you are using the phone if it is up to your ear.HOWEVER, scientific studies have shown that just taking a telephone call, even hands-off, is virtually just about as distracting to a driver as holding it up to your ear - the only real problem with that is it forces you to take emergency actions when necessary with only ONE HAND! -Ed*)

Other Automotive Hazards

from *The Wall Street Journal* February 12, 2008 by Joseph B. White. **More Muscle Fuels Collision Losses.** "... The average horsepower for new cars has risen steadily since 1985, both in absolute terms and in terms of horsepower per 100 pounds of vehicle weight. A 1981 Honda Accord had ...just 75 horsepower. A ... 2008 Accord has 177 ...[or] 275 horsepower. ... The **average** vehicle speed exceeded the posted limit on freeways in eight urban areas. .... HLDI study compares the insurance losses of a 2005 Pontiac Grand Am, a midsize GM car that had a 140 horsepower engine to Nissan Motor Co's 2005 Altima, outfitted with a 3.5 liter 260 horsepower engine. 'Collision losses for the more powerful Altima are an estimated 20% higher than for the less powerful Grand Am for rated drivers 25-64.' ... The Insurance Institute/HLDI conclusion is that higher horsepower correlates to increased insurance claim losses across the board - for younger and older drivers. ..." (*I really wonder about that conclusion considering the increased cost and complexity of cars over this period and has true inflation been accounted for? Those insurance folks are always looking for a reason to raise their rates and increase their profits, -Ed)*

from *SmartMoney* April 2008 by Daren Fonda. **The New Backseat Drivers:. Infrared beams. Thermal imaging. Detection algorithms. It's a brave new world of auto safety; proceed with caution.** "...a baffling array of new high-tech safety options: lane departure alerts (average retail price: $565), blind spot monitors ($430) and collision warning systems ($2250). ... Car dealers are hawking a whole range of automated space age features that promise not just to make drivers safer in the event of a collision but also to prevent accidents from happening. ... A pre-collision system, for one, will automatically tighten seat belts and hit the brakes when it senses an impending crash. Night vision, offered by a few of the high end marques for $2000 or more, uses infrared or thermal imaging technology (originally designed to help soldiers spot enemies in the dark) to let drivers see road hazards up to 1000 feet ahead. ... Washington, which is **mandating** a host of safer car features over the next five years. But it also doesn't hurt that the beleaguered car industry can actually make a few extra bucks while it's saving lives, since these new technologies can goose the price of a vehicle by several thousand dollars. (That blind spot monitor, for instance, can cost as much as $700, a **fivefold markup from wholesale**.)[*how's that for a nice profit markup!!!! =Ed Here's the real trick:*] Automakers also **bundle** new safety features into pricey packages. One example: Getting a special whiplash reducing headrest in a BMW 5 series may require paying an extra $2800 on a package that included leather seats. ... New safety technologies can actually lead to riskier driving - either by distracting the driver with new information or by offering a false sense of security. And it's not unheard of for cameras and sensors to be thwarted by weather or provide overzealous alerts that cause drivers to turn them off in frustration. ... The classic case; antilock brakes. ... it hasn't reduced overall fatalities. Indeed, in its first few years on the market, vehicles equipped with antilock brakes were disproportionately involved in certain types of fatal crashes. ... Some drivers mistake the system's signature

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THE WALL STREET JOURNAL.

ON

A16 Tuesday, July 29, 2008

LETTERS TO THE EDITOR

Gas Is Money, So Is Time: Does 55 MPH Make Sense?

Regarding Stephen Moore's "The Insanity of Drive-55 Laws" (op-ed, July 24): The drive-55 law seems to ignore economics, particularly the adverse impact on the country's productivity.

My pick-up truck will get 19 miles per gallon at 65 miles per hour and 21 mpg (a 10% increase) at 55. Assume gas is $4.50. If I drive 100 miles at 65 mph, I'll spend $2.30 more for fuel but arrive 17 minutes sooner than if I drove 55 mph. The trade-off on my time is about $8 an hour, or the minimum wage here in California. (This is far below the average hourly earnings of $18 per hour, according to the Bureau of Labor Statistics). I usually drive with my wife, so if I include her time the trade-off is now $4 an hour. We commute to work three days a week on our motorcycle (we bicycle to work the other two days), where I get 36 mpg at 65 mph, and the trade-off then is only $2 an hour.

In general, the higher the fuel efficiency of a vehicle, the less the driver and riders get for their lost time. Within the constraints of safety considerations, I believe drivers should be able to decide what their time is worth.

DAVE WOODMAN
South San Francisco, Calif.

Stephen Moore mentions that some want to "force everyone to share in the sacrifice." I'm tired of symbolic gestures, like the insane 55 mph speed limit, that are forcefully imposed via federal law by citizens little affected by it. You East Coast subway riders and city-driving moralists: Show me what you will sacrifice from your lifestyle before you single others out.

JOE KAIN
Lenexa, Kan.

I realized that the whole debate on gas mileage is targeting the wrong driving conditions. Gasoline is wasted waiting in traffic, and at traffic lights.

Houston began timing its downtown lights several years ago, resulting in better traffic flow and less congestion and, no doubt, savings in gasoline.

DEAN LISTIAK
League City, Texas

I take great exception to Mr. Moore's premise that human time is more important than oil and gasoline in his argument against a drive-55 national speed limit.

TOM HUMPHREY
Los Altos, Calif.

Stephen Moore praises "the newly ascendant Republican Congress" for repealing the 55 mph speed limit in 1995. He neglects to mention that it was a Republican, President Richard Nixon, who initiated the law in 1974.

THORNTON JORDAN
Columbus, Ga.

One important factor not mentioned is that with lower speed limits and slower traffic, road capacity is reduced, which increases traffic congestion. Road capacity is determined by the speed of the traffic times the number of lanes. Slowing traffic from 70 mph to 55 mph is a 21% reduction in road capacity, or about equal to removing two lanes from an eight-lane highway (both sides).

The result will be more congestion and more gridlock. That in turn will cost people even more time, make driving more tiring and difficult, and further reduce fuel economy since stop-and-go driving is the least efficient type of driving (using brakes wastes fuel).

It probably will increase the accident rate as well, which means even more congestion and a wasted use of law-enforcement assets. The law of unintended consequences strikes again.

LARRY WEITZMAN
Rescue, Calif.

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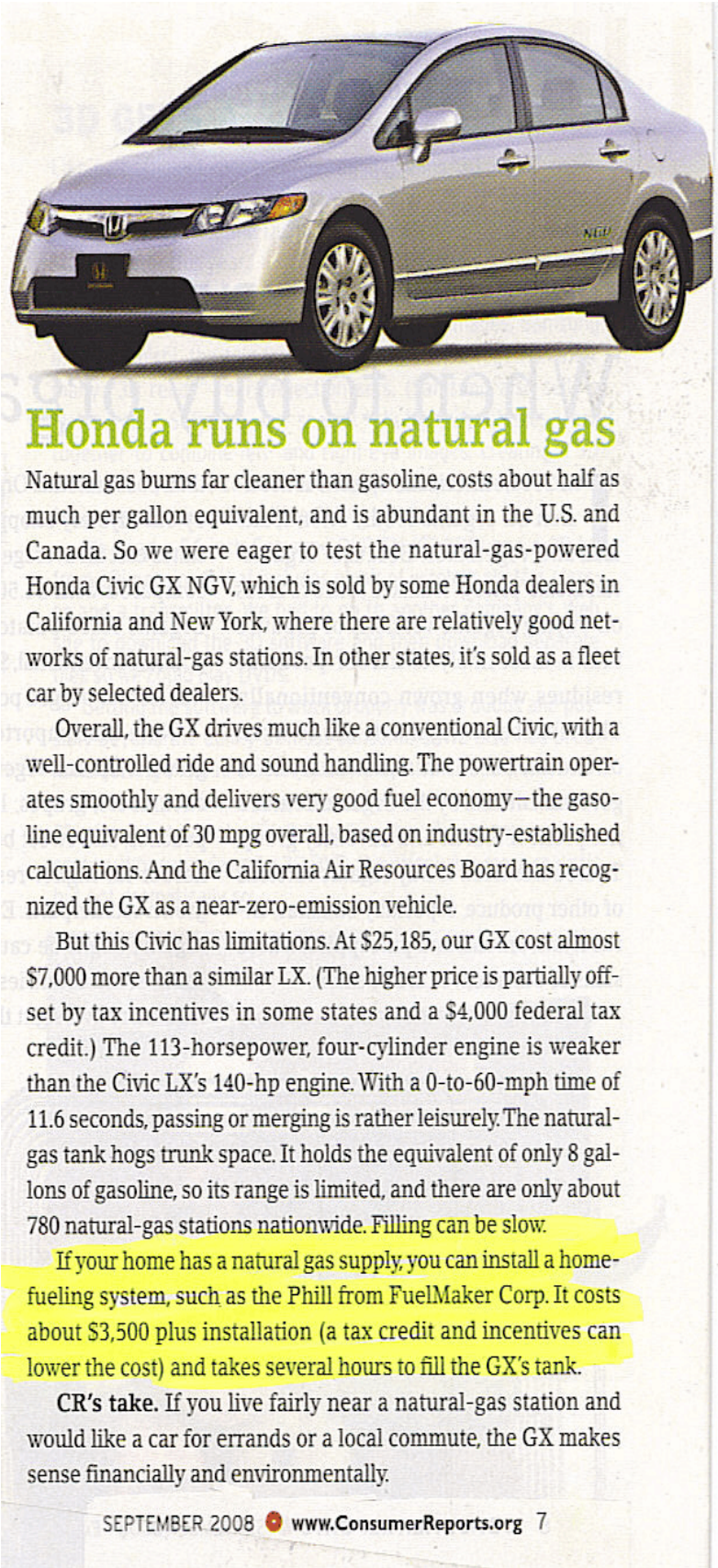
pulsing sensation for a mechanical malfunction and either ease up on the brakes or veer off the road. ... **The new must-have system is electronic stability control** ... preventing rollovers - the deadliest type of crash - cutting them 84 % for SUVs and 71 percent for cars. ..."

from **Accident Analysis & Prevention** 2008 in press: **The Effects of Practice with MP3 Players on Driving Performance.** Chisholm SL, Caird JK, Lockhart J. [Authors Abstract condensed-byPER] ... to determine if performance decrements decreased with practice. Nineteen younger drivers (mean age = 19.4, range 18-22) participated in a seven session study in the University of Calgary Driving Simulator (UCDS). ... Measures of hazard response, vehicle control, eye movements, and secondary task performance were analyzed. **Increases in perception response time (PRT) and collisions were found while divers were performing the difficult iPod tasks** ... Difficult iPod interactions significantly increased the amount of visual attention directed into the vehicle above that of the baseline condition. With practice, slowed responses to driving hazards while interacting with the iPod declined somewhat, but a decrement still remained relative to the baseline condition. The multivariate results suggest that **ACCESS TO DIFFICULT IPOD TASKS WHILE VEHICLES ARE IN MOTION SHOULD BE CURTAILED.** (Dr. Caird, Cognitive Ergonomics Research Laboratory, Dept Psychology, Univ Calgary, 2500 University Dr. NW, Calgary AB T2N 1N4 Canada)

OIL & ENERGY & IGNORANCE

from *The Wall Street Journal* November 20, 2007, "Bookshelf" by Spencer Reiss. Review of "Power to Save the World" by Gwyneth Cravens (Knopf, $27.97). **Green with (Nuclear) Energy.** ..., Ms. Cravens ruefully notes, than when she innocently planted her first organic garden in the early 1980s. ... people work calmly in the knowledge that an F-16 rammed at 500 miles an hour into a simulated concrete containment wall [of a nuclear power plant] will make a scratch only an inch deep. They also know that half the fuel in America's nuclear reactors..., the source of 10% of the country's electricity,... comes from dismantled Soviet bombs. A Coke can will handily contain all the uranium needed for a ... U.S.[person's] lifetime of electricity. (The coal equivalent is 68 tons.) ...Walking through Grand Central Terminal's granite corridors hits you with more radiation than a similar stroll through a nuclear power plant. ... Of course, nuclear power's funniest fact is: zero carbon. ... And so, while right thinking Americans fantasize about a solar-powered Seattle and a corn-fed Prius, smart countries from China and India to Finland are powering ahead with spectacular new 21st century nuclear reactors. ... It [IGNORANCE] nearly encapsulates 98% of public discourse about nuclear power: 'Secondhand ignorance. ..." *(Mr. Reiss writes about energy and new medial for "Wired" magazine.)*

YOUR PROBABLE NEXT CAR:



Honda runs on natural gas

Natural gas burns far cleaner than gasoline, costs about half as much per gallon equivalent, and is abundant in the U.S. and Canada. So we were eager to test the natural-gas-powered Honda Civic GX NGV, which is sold by some Honda dealers in California and New York, where there are relatively good networks of natural-gas stations. In other states, it's sold as a fleet car by selected dealers.

Overall, the GX drives much like a conventional Civic, with a well-controlled ride and sound handling. The powertrain operates smoothly and delivers very good fuel economy—the gasoline equivalent of 30 mpg overall, based on industry-established calculations. And the California Air Resources Board has recognized the GX as a near-zero-emission vehicle.

But this Civic has limitations. At $25,185, our GX cost almost $7,000 more than a similar LX. (The higher price is partially offset by tax incentives in some states and a $4,000 federal tax credit.) The 113-horsepower, four-cylinder engine is weaker than the Civic LX's 140-hp engine. With a 0-to-60-mph time of 11.6 seconds, passing or merging is rather leisurely. The natural-gas tank hogs trunk space. It holds the equivalent of only 8 gallons of gasoline, so its range is limited, and there are only about 780 natural-gas stations nationwide. Filling can be slow.

If your home has a natural gas supply, you can install a home-fueling system, such as the Phill from FuelMaker Corp. It costs about $3,500 plus installation (a tax credit and incentives can lower the cost) and takes several hours to fill the GX's tank.

CR's take. If you live fairly near a natural-gas station and would like a car for errands or a local commute, the GX makes sense financially and environmentally.

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Hyde Park Editorial

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Andrea Pininfarina...

Andrea Pininfarina dies in Vespa crash

Andrea Pininfarina, chairman and CEO of Italian design firm and contract manufacturer Pininfarina S.p.A., died Thursday morning in a motorcycle crash near Turin, Italy. Pininfarina, 51, was riding a motorcycle to the company design and R&D center in Cambiano, 12 km south of Turin, when the crash occurred about 8 a.m. A preliminary local police report says a car crashed into Pininfarina's Vespa ...

FROM Autoweek, daily internet email news, Thursday, August 08 2008. *Another tragedy. He was only 51, yet he was certainly famous for his talents in auto design. Please note that he was on a motorscooter, essentially totally defenseless, totally vulnerable on the open road. If you are thinking about buying a motorscooter to save ga$, think of this.... ditto bicycles and motorcycles. Or even being a pedestrian... I never walk on the roads anymore without my red and yellow reflector vest, since I almost got run down a couple of times, night & day.*

*Conversely, when it comes to traffic control, * in Denmark, where they seem to do so many things better than us* ***in suburban areas, when they want to slow drivers down, they leave children's bicycles out on the edge, shoulder or curb of the road. Such "MENTAL SIGNAGE !!!" actually works superbly to slow drivers down!***

We are going to try it.too.

*From WSJ book review,31 July 2008: "Traffic" by Tom Vanderbilt (Knopf).

We leave you with a couple of statistical pearls to consider...

Send us more papers!...please.

-Ed