

THE ASSOCIATION OF OTOLARYNGOLOGISTS OF INDIA

HARYANA STATE BRANCH

OFFICIAL NEWSLETTER

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12th Annual Conference of AOI Haryana State Branch and 4th Live Surgical workshop



Dr. G.S. Kohli receiving life time achievement award from Member of MMET Trust

Haryana state conference of AOI and 4th live surgical workshop was held on 25th and 26th November 2006 at M.M. Medical College, Mullana (Ambala) The conference was attended by nearly 150-200 delegates from Haryana, Punjab, H.P. and Delhi. Live Surgery was performed by Dr. J.C. Passey (MAMC, Delhi) and Dr. Sanjay Sachdeva (Apollo Hospital, Delhi). Guest lecture cum Tuli Sunder Dass oration was given by Dr. Sanjiv Misra, Oncosurgeon from KGMC Lucknowand Dr. R.G. Aiyer from Baroda Medical College.

Cadaveric dissection was done by Dr. S.P.S. Yadav who demonstratd Thyroplasty operations and Temporal bone dissection was done by Dr. Vikas Kakkar from Pt B.D.S. P.G.I.M.S., Rohtak

The Delegates appreciated the a cademic atmosphere of MIM Medical College Mullana, they were particularly happy to see the educational city of Mullana under the able guidance of Chairman Sh. Tarsem Garg who was kind enough to give every possible help to make the conference a grand success. The arrangements for stay were made free of cost for the delegates keeping in view the limited resources in a rural setup.

A very interesting entertainment programme including a fashion show was well organized by the students of medical college. Lal Kotumal Award was won by Dr. Ishapreet, post graduate student from, Patiala. An ENT quiz competition was held between various teams of different medical colleges and was won by team from Government Medical College, Patiala.

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From the Editor's Desk

Dear Members

I feel highly honored and thankful to the members of Haryana AOI for posing faith in me & electing me as "Editor of the News Letter." The news letters and scientific meetings make a significant impact on the development of specialty in the regions and have a



special bearing on introduction of newer techniques to keep abreast with the latest I am confident that the readers will take full advantage of these newsletters. My predecessors have done a wonderful job by setting a high standard for this news letter and it will be my endeavor to take this newsletter to further heights. But this will not be possible without the active participation of all the members. I would request all the members to contribute their academic material and other information regarding their achievements in the field of otolaryngology so as to make the news letter a great success.

I personally feel that this news letter may act as a foundation stone for a scientific journal of the Haryana AOI in due course of time. Let us work together to make this dream of having a journal come true.

With regards!

Dr. Surinder K. Singhal Hon Editor

Sudden Sensorineural Hearing Loss A Medical Emergency



Introduction

Prof. Arjun Dass GMCH, Chandigarh

Sudden hearing loss (SHL) is a medical emergency for which definitive diagnosis and treatment is still largely unknown. It was first described in the literature by De Klevn in 1944. SHL generally refers to hearing loss of sensorineural origin. It has been defined for research purposes

and has been accepted by most authorities as 30 dB or more sensorineural hearing loss over at least three contiguous audiometric frequencies occurring within 3 days or less.

Estimates report approximately 15,000 reported cases of SHL per year worldwide with 4000 of those occurring in the United States. No data regarding SHL is available in India as yet but One in every 10,000 to 15,000 people will suffer from this condition, with the highest incidence occurs between 50 and 60 years of age. The lowest incidence is between 20 and 30 years of age. Of the patient suffering from SHL, 2% are bilateral. In most series, the incidence was nearly equal in men and women.

There are many potential causes of SHL, but despite extensive evaluation, the majority of cases eludes definitive diagnosis and therefore, remains idiopathic. Reports estimate that the etiology of SHL is diagnosed in only 10% of cases. Suggested causes of idiopathic sudden sensorineural hearing loss (ISSNHL) include viral infections, immunologic, vascular compromise, and intracochlear membrane breaks. It is unlikely that any single one of these pathophysiologic processes explains all cases of ISSNHL. Treatment regimens aimed at addressing the underlying problem in each of these states have been suggested including decreasing cochlear inflammation, improving inner ear blood flow and oxygenation, and re-establishing the endocochlear potential.

Clinical History and Examination

Evaluation and management of SHL should be considered medically urgent, if not an emergency. The primary goal is to rule out any treatable causes.

Diagnostic evaluation of the patient with sudden hearing loss begins with a thorough history and physical exam. Details of the circumstances surrounding the hearing loss and the time course of its onset should be elicited. Associated symptoms, such as tinnitus, vertigo or dizziness, and aural fullness should also be asked about. Clinical experience has shown that about one-third of patients note their hearing loss upon first awakening in the morning, and that about one- half the cases will have associated vertigo. Patients should also be questioned about previous otologic surgery, ototoxic drug use, and previous or concurrent viral or upper respiratory tract infections. Any history of trauma, straining, diving, flying, and intense noise exposure should be noted. Past medical history of other diseases associated with sudden hearing loss should also be obtained such as diabetes, autoimmune disorders, malignancies, neurologic conditions (multiple sclerosis), and hypercoagulable states. African-Americans should be asked about sickle cell disease.

A complete head and neck exam should be performed on all patients with sudden hearing loss. More often than not, the exam will be unremarkable, however, any processes such as middle ear effusions, infections, cholesteatoma, and cerumen impaction should be excluded. A thorough neurological exam including Weber and Rinne, cerebellar and vestibular testing should be performed.

Diagnostic Testing

An audiogram (pure tone, speech, tympanometry, including stapedial reflex testing) should be performed on all patients with sudden hearing loss. The audiogram is the foundation of the diagnosis and provides prognostic information. Serial testing provides documentation of the progression or resolution of the hearing loss and response to treatment. In addition, it may help to exclude patients with secondary gain or with pseudohypacusis.

Continued on page 4

President's Address

Dear colleagues,

Hello.

I am thankful to all of you for electing me to the highest & esteemed post of President of AOI Haryana. This is my great privilege to work for the Association & I will try my level best to carry out my duties sincerely & honestly.



For the last few years the standards of our association has risen considerably. This was possible because of hard work of our able past Presidents, secretary & many other important members.

Annual conferences not only provides good academic feast but also a social get-together. No body could imagine organizing temporal bone dissection course outside the medical college but AOI Haryana is organizing this course for the last two years. This is a great achievement.

This year onwards we intend to organize one day CME programme on computer and its application in relation to medical profession. I request the members to give their consent/opinion regarding this, to the secretary Dr. Sanjay Khanna. This will help us in organizing the event in a nice manner.

On 25th of March, 2007 we had a meeting of executive body to discuss the situation which has risen due to Rewari members. We have planned a protocol for organizing the annual conference. In future all the conference committees will follow this protocol. The main aim of the protocol is to maintain the prestige of AOI. Dr. Sanjay Khanna will circulate the minutes shortly.

In the end I shall request the members to maintain the brotherhood in the association.

Thanking you,

Yours truly, Dr. B.P.S. Virk President-AOI

Exophthalmos and ENT Surgeon

Introduction:

Exophthalmos is not an uncommon condition that an otolaryngologist encounters in his or her practice. The evaluation and treatment of exophthalmos falls in the domain of ophthalmologist, neurosurgeon, physician and otolaryngologist. Essential workup of a patient presenting with exophthalmos include a detailed history, clinical examination, radiological evaluation of the orbits in the form of ultrasound (B or A-scan mode), CT scansand MRI.

Conditions causing exophthalmos that an otolaryngologist is

likely to encounterare discussed as under: -

A) Inflammatory Sinus Diseases

i) Purulent Bacterial Sinusitis

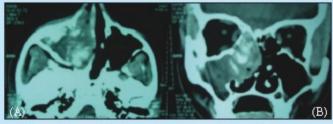
Bacterial sinusitis when involves the orbit can cause proptosis. Proptosis with edema of upper eyelids, chemosis, decreased ocular motion along with purulent nasal discharge, sinus tenderness are suggestive of diagnosis. Infection from sinuses spread by two routes: thrombophlebitis or periphlebitis of venous connections and direct spread through lamina papryacea of ethmoids. The usual organisms are S. pneumoniae, H. influenzae. Treatment includes antibiotics and nasal decongestants. Surgical drainage is required when conservative management fails.

ii) Mucormycosis

More than half of patients of mucormycosis have uncontrolled diabetes. The other conditions which predispose the patient to this grave fungal infection are malnutrition, immunodeficiency, chronic renal failure, steroid or cytotoxic therapy. The proliferation of fungus can extend to involve orbit. The fungus invade arteries and arterioles and cause ischaemic tissue necrosis. Key to treatment is control of underlying cause, appropriate antifungal treatment and debridement as required. Surgical resection has to be aggressive and orbital exentration may be required. Amphoterican is the drug of choice and is given in a dose of 0.8-1.2 mg per kg per day. A total dose of 3-4 gm over a period of 2-3 months gradually increasing from a low starting dose. Liposomal amphotericin a newer option which is less toxic but more expensive.

iii) Aspergillosis

Aspergillosis is another fungal infection which can occur in otherwise healthy individual. People with chronic sinusitis and polyp disease are at increased risk. Maxillary and Ethmoid sinuses are usually involved. Orbits are involved slowly over period of several months as a progressive granulomatous process with fibrosis .CT scan of the nose and paranasal sinuses gives a fair idea of the diagnosis. The typical picture is that of a diffuse opacification of sinuses along with hyper dense shadows. Definitive diagnosis is made after biopsy



CT Scan of Nose and PNS (A-axial & B-coronal) showing hetrogenous density mass in the maxillary and ethnoid sinus on the right side

.Wide surgical excision along with exteriorisazation is required.

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SECRETARY'S DESK

Greetings from our New Team of AOI Haryana.

First of all I'm thankful to all the members for electing me as Honorary Secretary of AOI Haryana and showing faith on my shoulders.



Our beloved AOI Haryana is the binding force for all ENT Surgeons. I feel short of words to describe the phenomenol

work done by **Dr. Janak Choudhary** and the previous team and of course other members who have worked hard in every respect to make AOI Haryana on the lines of best branches of India. I along with my new team definitely try our level best to keep the pace of last three years, of course with your support and blessings of GOD.

Many milestones were achieved and many are still in pipeline. So few of the New Visions for AOI Haryana are as under:



However these visions are only possible with collective support of each and every member of AOI Haryana Further I request all the AOI members to kindly visit our **WEBSITES** www.aoiharyana.com and www.aoi-haryana.tripod.com (developed & governed by **Dr. Arun Gupta, Jind**) as much hard work has been done on these sites. Also constant feedback and suggestions will be appreciated.

Our association is thankful to **Dr. Ashok Arora** (Rewari) and **Dr. Arun Gupta** (Jind) for sponsoring **LALA KOTU RAM MEMORIAL** award and **SHRI HARI OM PRAKASH GUPTA MEMORIAL** award respectively. Their feelings are well appreciated.

I personally feel that there must be some Public Awareness programmes in your respective cities, regarding problems in ENT and their latest/ advance management part. This will encourage the patient for early visit to ENT specialist and best treatment possible with positive results.

Lastly Irequest all the members to kindly give suggestions from tome to time so as to uplift our association. Also encourage others to become members of AOI Haryana and to increase our strength.

With warm regards.

Dr. Sanjay Khanna Hon. Secretary, AOI Haryana Email: entkhanna@hotmail.com Mobile: +91-98960-34414, 0184-2270202 from page 2

The following is a list of laboratory studies that can be ordered. Initial screening tests should be directed based on history and suspected conditions.

- 1) Complete blood count (CBC)
- 2) Erythrocyte sedimentation rate (ESR)
- Glucose
- 4) Cholesterol/triglycerides
- 5) T3, T4, TSH
- 6) PT, PTT
- VDRL,RTA-ABS(MHA-TP)
- 8) HIV
- 9) Lyme titer

Magnetic resonance imaging (MRI) is recommended by the majority of authors for patients with asymmetric hearing loss. In one survey of 79 otolaryngologists, 38% would order imaging on the patient's initial visit. MRI is useful in evaluating for acoustic tumors, multiple sclerosis and cerebrovascular accidents. There are some proponents of following these patients and imaging only if asymmetric hearing persists. However, Berg et al., in a series of acoustic neuromas showed that 13% presented with sudden hearing loss, and of these 23% recovered auditory function.

Treatment

The majority of cases of SHL treated by otolaryngologist are for those with no definable cause. The treatments for cases with known etiologies involve addressing the underlying condition (i.e. treatment of: acoustic neuroma with excision, ototoxicity with cessation of ototoxic drugs, multiple sclerosis with medical therapy, embolic disease with anticoagulants, sickle-cell crisis with oxygen, bacterial meningitis with antibiotics and so on). This discussion will be limited to the treatments which have been proposed for patients with no underlying cause for their hearing loss based on the previous mentioned theories addressing the etiology of ISSNHL.

Therapy for ISSNHL is a subject of controversy. The high spontaneous recovery rate of ISSNHL (47% to 63%) and its low incidence make validation of empirical treatment modalities difficult. Many treatment regimens have been proposed for ISSNHL. Below is a list of treatment modalities which have been used and some of which are currently used today for the treatment of ISSNHL:

Antiinflammatory/	Steroids
immunologic agents	Prostaglandin
	Cyclophosphamide
	Methotrexate
Diuretics	Hydochlorothiazide/triamterene Furosemide,
Antiviral agents	Acyclovir, Valacyclovir
Vasodilators	5% carbon dioxide with 95% oxygen (Carbogen), Papayerine

Buphenine (nylidrin) Naftidrofuryl (nafronyl)

Journal Scan

Thymoxamine, Prostacyclin, Nicotinic acid, Pentoxifylline

Volume expanders/ Hydroxyethyl starch Lowhemodilutors molecular-weight dextran

Defibrinogenators Batroxobin Calcium antagonists Nifedipine

Other agents & procedures Amidotrizoate, Acupunture, Iron

Vitamins, Procaine

Prognosis

Published series report spontaneous recovery rates for patients with SHL range from 47% to 63%. These reviews combined patients with partial and complete recovery and patients with all audiogram types. Four variables have been shown to affect recovery from ISSNHL: (1) time since onset, (2) age (3) vertigo (4) type of audiogram.

- Time since onset Sooner the patient is seen and therapy initiated, the better the recovery. Early 72 hours are considered to be the golden period.
- Age Those under 15 years and over 60 years are considered the candidates of poor prognosis.
- Vertigo Patients with severe vertigo will have significantly worse outcomes than patients with no symptoms of vertigo.
- 4) Audiogram Patients with profound hearing loss will have significantly decreased recovery rates. Patients with mid frequency hearing loss, particularly when hearing at 4000 kHz is worse than 8000 kHz will have an excellent prognosis. The majority of studies confirm the findings that profound hearing loss is a poor prognostic sign indicating more severe injury.

Suggested Reading

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Adenotonsillectomy for obstructive sleep apnea syndrome in young children. Prevalence of pulmonary complications.

Postoperative complications in children undergoing adenotonsillectomy for OSA - Statham M, Elluru R, Buncher R, Kalra M.

This is a retrospective study of children under the age of six who had undergone adenotonsillectomy for "obstructive breathing during sleep" between 1999 and 2001 at the Cincinnati Children's Hospital. The authors define this condition as patients with a history of snoring and adenotonsillar hypertrophy. The authors acknowledge that this definition is a limitation to the study as it may well include patients who do not have obstructive sleep apnoea (OSA). The study includes 2,315 children who underwent adenotonsillectomy and focuses on the 149 children who developed postoperative respiratory complications. They found that children under the age of three years were more at risk for developing postoperative respiratory complications such as oxygen desaturation, apnoea, atelectasis, pneumonia, requirement for insertion of a nasopharyngeal airway, or intubation. The overall rate for respiratory complications was 9.8% in children under three years of age and 4.9% for those aged between three and five years. This is a large and interesting study. The authors are correct in stating that a clearly defined practice standard for postoperative care of these patients is needed and this study may contribute to any guidelines produced by national associations.

Source: Archives of Otolary ngology Head & Neck Surgery: 2006;132:476-80.

Complications of Sinus Surgery Using Powered Instrumentation

- Graham SM

The author describes in detail the potential complications of the use of powered instrumentation in endoscopic sinus surgery. Powered instrumentation is widely used in endoscopic sinus surgery and has the capacity for rapid, accurate dissection, sparing adjacent uninvolved mucosa. There is evidence however, that there has been as escalation in the scale and consequences of surgical misadventure. Orbital complications can occur where powered instrumentation is used as the periorbita can be breached in a fraction of a second and cause extensive resection of the medial rectus within just one revolution of the blade. This injury is difficult to treat as much of the muscle is resected and, even with muscle balancing surgery, these patients have diplopia when they change from primary gaze. Blindness may occur, due to optic nerve damage, in extensive orbital resection or where the nerve lies superficially in the sphenoid sinus. Blindness may also be the result of an orbital haematoma and techniques to treat this

condition, such as canthotomy and orbital decompression, are explained. Intracranial complications also occur with a greater incidence of cerebrospinal fluid (CSF) leaks and brain parenchymal injury, again due to surgical misdirection, and the speed of tissue injury with powered instrumentation. Internal carotidinjuries most commonly occur with the use of powered instrumentation in the sphenoid sinus. These result in massive haemorrhage and treating this may necessitate occlusion of the internal carotid. Recently interventional radiologists have used newer techniques involving stenting the internal carotidartery, therefore preventing the potential adverse consequences of arterial occlusion. The author has written an eloquent description of the potential complications of powered instrumentation and gives additional tips of ways to avoid injuries, such as not directing the dissecting port straight at the orbit, but instead at 90 degrees from the lamina and dissecting superiorly and inferiorly.

Source: Operative Techniques in Otolaryngology, Head and Neck Surgery: 2006;17(1):126-34.

Godfrey Hounsfield and the dawn of Computed Tomography

Petrik V, Apok V, Britton JA, Anthony Bell B, Papadopoulos MC

The computed tomography (CT) scanner, as we know it today, was developed because of a successful collaboration between an imaginative engineer, Mr Hounsfield, and a brilliant clinical neuroradiologist, Dr James Ambrose. It was developed at the Electrical and Musical Industries (EMI) laboratories, which also produced the Beatles records. According to rumours, the profits made by the B eatles record sales were used to fund the development of the scanner! The authors of this article trace the humble origins of Godfrey Hounsfield from his parent's farm, through his interests in mechanical and electrical gadgets, to his successful collaboration with Dr Ambrose and finally on to him being awarded the Nobel Prize for Medicine along with Allen M Cormack in 1979. The initial scans were made on preserved human brains. However, the formalinused to preserve the brain had altered brain tissue structure and the results could not be used to extrapolate to living tissues. So bovine brains were used but even in these, Ambrose detected widespread haemorrhage on scanning following electric shock, which was commonly used in abattoirs to stun cows before slaughter. Ambrose, then, hit on the solution of using 'kosher killed' bovine brains for the initial scans! The first human patient, a woman with a suspected tumour, was scanned on 1st October, 1971. To Hounsfield and Ambrose's astonishment, the picture clearly showed a dark circular cyst in the brain and this heral ded the dawn of CT scanning. Today we all depend on CT scans to confirm our diagnosis, to determine management and to provide us with a map during surgery. This interesting historical review is worth reading.

Source: Neurosurgery: 2006;58(4):780-7.

Adrenal suppression and osteoporosis after treatment of nasal polyposis

- Bonfils P, Halimi P, Malinvaud D

There is an increasing trend to treat nasal polyps with systemic steroids. Different regimes are quoted for adults, usually ranging from 25mg prednisolone daily to Img/kg daily for between seven and ten days. Two to three such courses per year are deemed reasonable, with surgery reserved for treatment failures, suspicions necessitating histology and those in whom steroids are (relatively) contraindicated. This paper, from Paris, examines the consequences on bone density and adrenal suppression of only slightly exceeding such an approach. They looked at 46 patients with nasal polyps, most of whom were at the more severe end of the 'spectrum (78.3% with asthma, 28.3% with aspirin sensitivity). Their patients had all received more than three steroid courses of Img/kg/day prednisolone, totalling at least 21 treatment days in the preceding year. Bone mineral density measurements were taken of the lumbar spine, femoral neck and proximal femurand compared to a standard reference population. This enabled a diagnostic category of normal, osteopaenic or osteoporotic bone to be made, in accordance with the World Health Organisation (WHO) and International Osteoporosis Foundation guidelines. Adrenal suppression was assessed using the synacthen test. Their results showed five patients to have osteoporosis and 20 to have osteopaenia at the lumbar site out of 41 measured at this site. Eighteen patients (again out of 41 measured) had osteopaenia of the femoral neck. Twenty patients (48.8% of those tested) had evidence of adrenal insufficiency on the synacthen test. How these results translate into actual morbidity is obviously hard to say. It would also be useful to repeat these assessments on those patients who perhaps only had two or three steroid courses over the year, possibly at slightly lower doses of 25mg per day.

Source: Acta-Oto-Laryngologica: 2006;126:1195-200.

Conference News

XIIIth Annual ENT Conference and Vth Live Surgical Workshop of The Association of Otolaryngologists of India, Haryana State shall be held at Rewari on 27th & 28th Oct. 2007.

Contact: Dr. Adesh Saxena, Rewari M.: 94164-79700

November 15-17, 2007: International Workshop on Sinus Surgery at Indore featuring Prof. Wolfgang Draf, Germany and other International and National faculties.

Contact Dr. Sanjay Agrawal entsanjay@yahoo.co.in Tel:0731-2450208. Mobile +91 98260 33208



Dr. Sanjiv Mishra from K.G.M.C., Lucknow receiving award for Guest lecture cum Tuli Sunder Dass oration from Dr. G.S. Kohli

Panel discussion on tympanoplasty was moderated by Dr. Chander Mohan from Government Medical College Shimla in which many eminent doctors from Delhi, Punjab and Haryana Participated Lifetime achievement award was given to Dr. G.S.Kohli retired professor of ENT from Pt.B.D.S.P.G.I.M.S.Rohtak.

It was followed by the GBM and new executive were elected. Dr B.P.S.Virk from Kurkshetra was elected as president and Dr Sanjay Khanna from Kamal as General Secretary of the association. It was also decided that the next annual conference will be held at Riwari and Dr Adesh Saxena will be the organizing secretary.

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B) Benign Tumours and Tumour like conditions

Inverted papilloma Osteoma

Mucocele Nasopharyngeal angiofibroma

Fibrous dysplasia Ameloblastoma

A detailed history and clinical examination is required to rule out these conditions in a patient presenting with exophthalmos CT scan images are diagnostic in these conditions. Biopsy may be required in some cases. Treatment is removal of the tumour by open or transnasal approach.

C) Malignant Tumours

Malignant tumours of the nose and paranasal sinuses are another important cause of proptosis. The common tumours are squamous cell carcinoma, Adenoid cystic carcinoma, olfactory esthesioneuroblastom, and sarcomas. The diagnosis is established with the biopsy and treatment is in the form of surgery or radiotherapy alone or in combination with chemotherapy

D) Endocrine Disorder: Graves Ophthalmopathy

Graves ophthalmopathy is bilateral disease but proptosis may be asymmetric. The diagnosis is generally straight forward with classical orbital changes and hyperthyroidism CT scan of the orbit show enlarged extra ocular muscles and a bulging orbital septum due to protruding orbital fat. Besides cosmetic problems and those related to comeal exposure

patient can present with diplopia and optic neuropathy ranging from visual loss to visual field defects. The treatment includes reassurance, eye care, oral steroids, radiation therapy and orbital decompression.



Clinical Photograph of the patient showing exophthalmos along with thyroid swelling (Arrow)

Conclusion: Exophthalmos

is presentation of a diverse group of diseases, not a disease in itself, careful clinical and radiological evaluation is required to rule out the various causes and establish the diagnosis. Treatment depends on the underlying cause. Antibiotics are warranted for bacterial infective causes. Appropriate debridement and antifungal therapy is given in cases of invasive fungal disease of paranasal sinuses. Benign or malignant diseases causing proptosis are treated on the merits of the case. Severe cases of graves orbitopathy require treatment when there is exposure keratitis or optic neuropathy and in less severe cases for cosmetic reasons.

Further readings

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- ** Senior Lecturer, Department of Otorhinolaryngology and Head Neck Surgery, Government Medical College and Hospital, Chandigarh, India

Congratulations!

Dr. Vikas Kakar, on being promoted as Professor of ENT at Pt. Baghwat Dayal Sharma Post Graduate Institute of Medical Sciences, Rohtak

On the lighter note

Marriage: It's an agreement in which a man loses his bachelor degree and a woman gains her masters.

Life Insurance : A contract that keeps you poor all your life so that you can die Rich.

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(Soothing Effect from Migraine)