Contents

InteRyc-volume 2, April, May and June, 2002

ALL INDIA STRABISMOLOGICAL SOCIETY

JKA Institute of Strabismology and binocular Vision

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President AISS, Director JKAI & Author & Editor of InteRyc:
Sudha Awasthi Patney, MBBS, MS (Ophth), FRCOphth (London)

(NOTE: The following is a repeat for obvious reasons)

A special request to the members

This is an appeal to all the members to please start a campaign for prevention of amblyopia. Actually I am of the opinion that a legislation is needed badly, that will make it compulsory that every child's eyes are thoroughly examined by the age of 1 year, so that measures can be taken to prevent amblyopia (strabismic, anisometropic and ametropic) and strabismus. If it could be done for vaccination, it can be done for eye examination also.

At present there is general indifference towards this subject. It is also obvious that pediatricians and ophthalmologists have to be trained not to advise delay in treatment because the patient is a young child / infant. It is tragic that although parents have now become aware of the need for early treatment, the pediatricians only rarely refer them to ophthalmologists who are advising them to wait until the child is 8-10 / old enough for examination. We have to advise them strongly against this practice. If we can not compel the Government to bring in legislation, we can at least alert the public, the pediatric physicians and the ophthalmologists.

It is obvious that many more Institutes of Strabismology are needed in various parts of the country. Would you, dear members, be willing to take on the task of starting a branch of this JKA Institute in your area? *Any help and advice that I am capable of providing will be forthcoming. You will need some basic instruments to start with. Orthoptic instruments are the cheapest of the lot, have you noticed*? *Please let me know at once if you are interested.*

Please try to alert the patients, parents and other relatives, the public and other physicians, particularly ophthalmologists and pediatricians about the dangers of amblyopia, strabismus and other complications if significant refractive errors are not corrected within the first years of life and if strabismus is not treated immediately.

It is very painful to see so many cases of amblyopia. This condition, as you know, is totally preventable if treated early, whatever the age of the patient, the younger the better. The best time is immediately after the start of strabismus. However, it is obvious that to prevent ametropic and anisometropic amblyopia and in many cases strabismus, the children have to be thoroughly checked at least once by the age of 1 year. The saying that prevention is better than cure is *truest* in the case of strabismus and amblyopia.

REMOVE YOUR COBWEBS (Ryc)

(The section on information)

1. About the Institute
2. About the Society
3. About the courses
4. About the workshop
5. About InteRyc, the News-Letter-Update of the society
6. About the Indian Orthoptic Journal to be restarted soon.

1. *About the Institute*

A) *The need to have a squint treatment center* and a training center for strabismologists and orthoptists in India could not be ignored anymore in *nineteen fifties*. Dr. H.L.Patney felt it most acutely as he had trained as a premedical student, medical Graduate and postgraduate in ophthalmology in UK. He had been doing orthoptics, contact lenses and all types of surgery as a Registrar in the Ophthalmology department of the Royal Cardiff Infirmary in Cardiff, Wales, UK back in 1942-44. He had the good fortune of being the assistant of Sir Tudor Thomas and used to assist him in his private practice also. Sir Tudor Thomas was a living legend in those days and was a pioneer in keratoplasty. However, he did all types of operations including retinal detachment repair and plastic surgery. Young Dr. Patney was given lots of opportunity to operate even on Sir Thomas' private patients. Sir Thomas was a very famous and busy man and he must have had confidence in Dr. Patney's prowess in surgery as he gave him even major surgeries to do. Sir Thomas' words and signatures on Dr. Patney's old books testify to this.

In 1946 when Dr. H.L. Patney was asked by Dr. Mehrey, the founder of Sitapur Eye Hospital to make a plan for the expansion of the hospital, he did a thorough job. He included in the plan, the name of *a squint / orthoptic department and school* along with those of ocular pathology, instrument factory, blind school, optometry school, postgraduate institute of ophthalmology, trainee's hostels, staff's residences etc. Much later he used to say that everything in that plan materialized except a boundary wall.

Dr. Mehrey who was himself keen on keeping everything upto date in his hospital happily worked hard to realize their dreams. It took them a few years to get a first rate orthoptic department and school.

1) The beginning was with *an orthoptic department* in early fifties by Dr. Patney who taught a smart compounder in the hospital the basic techniques of orthoptic examination and exercises on synoptophore.

2) *The Orthoptic School* was started in 1960 and according to plan Dr. Sudha Awasthi (who was at that time in K.G. Medical College, Lucknow) was asked to join the hospital by Dr. M.K.Mehra, (Dr. Mehrey's son). Dr. Awasthi had just passed her MS (Ophth.) from King George's Medical College, Lucknow, and was known to be specially interested in the subject. She joined Sitapur Eye Hospital and was soon after sent to London in October 1960.

3) A first rate orthoptic department, the first in India, which was on the lines of that at Moorfields Eye Hospital (High Holborn branch where Mr. T. Keith Lyle was the Director), was established after she returned from London after 1 year's training under Mr. Lyle.

B. *The need for imparting training in the subject of strabismology* (including orthoptics), was repeatedly impressed upon Dr. Sudha Awasthi (now Patney) by another living legend of those days, Mr. T. Keith Lyle. He was in 1960 and later for many years, the Dean of Institute of Ophthalmology, London and Director and Surgeon-In-Charge of the famous Orthoptic Department of the Moorfields Eye Hospital (High Holborn branch), London. Dr. Sudha Awasthi was training under him to further her somewhat limited knowledge of the subject, already gained during the running of an orthoptic clinic by her from 1957 to 1959 under the guidance of Prof. M.K.Mehra, a double FRCS.

Mr. Keith Lyle insisted that she should also train like an orthoptist-trainee in their Orthoptic School to gain first hand practical knowledge so that she can train orthoptists and Ophthalmologists / strabismologists with confidence. She stayed at Moorfields Eye hospital for 1 year and was then sent to Germany and Switzerland to learn first hand, pleoptics from the two pioneers (Prof. Cuppers of Giessen, W. Germany and Prof. Bangerter of St. Gallen, Switzerland, respectively). On her return to India in 1961, the ground was ready for her to impart to the ophthalmologists and the orthoptic trainees, special training in strabismology and orthoptics. The *first Squint / Orthoptic department and Orthoptic School of India had already been started at Eye Hospital, Sitapur, which was the premier eye institution of India in fifties, sixties and seventies* (for some more information see the inside of the back page). During her days there she kept on running the squint department, training the orthoptists, DOMS candidates (as Associate Professor in the Nehru Postgraduate Institute of Ophthalmology) and visiting ophthalmologists wishing to learn the subject.

C. *The idea of starting a training institute for strabismology* was conceived soon after Dr. H.L. and Dr. Sudha Awasthi-Patney left Sitapur and came to Rajkot.
The center for squint treatment was being run since their arrival in Rajkot in 1972 but formal inauguration was performed in 1983. However, due to Dr. H.L. Patney's serious and prolonged illness the plan had to be kept suspended. The Institute started functioning in real earnest since 1996 but the foundation was being strengthened by Dr. Sudha Awasthi-Patney since 1994. She took a 4.5 months study tour of USA and UK in 1994, followed by annual visits to update her knowledge in preparation for starting and running the Institute and reviving the AISS. New orthoptic instruments were bought and old ones serviced.

D. In 1996 the Institute became functional along with the newly revived AISS.

E. At present there are only 29 members in good standing, i.e., the members who have paid up their dues until last year (2001). In all there were 88 registered members. Invitation to join the society has never been repeated / sent out again after 1997.

F. The Institute is running a fellowship course by correspondence. A diploma course is soon to be started for people who find the fellowship course too hard.

G. Other activities are the various annual contests, the winners getting trophies and cups and a total of Rs.4350 in cash prizes every year.

H. There is a fellowship (Rs.1000/pm) for members 35 years old or younger during their stay at Rajkot for practical experience. So far nobody has applied for it.

2. <u>About the Society</u>

(1) All India Strabismological Society (AISS) was *conceived and started* by Dr. H.L. Patney and Dr. Sudha Awasthi in 1967. The idea came to them during their participation in the founding session of the International Strabismological Association (ISA), which was held in 1966 at Giessen, W. Germany. Prof. Cuppers, one of the pioneers of pleoptics was the head of Ophthalmology at the Universitats Augenklinik (University Eye Clinic) there. Mr. Keith Lyle was the founding president and Dr. G.K. von Noorden, the founding secretary. Dr. Sudha Awasthi was one of the panelists and speaker at the ISA meeting.
One of the 4 aims of ISA is to spread the knowledge of the subject of strabismology. The other three are given on the inside of the front cover.

(2) The founding meeting of the society was held in Calcutta in 1967 during the AIOS conference. Neither Dr. Patney nor Dr. Awasthi wished to be the President. They asked Dr. L.P.Agarwal to be the first president and he accepted. Dr. Awasthi was the founding secretary and Dr. Patney the treasurer. Many senior and well-known ophthalmologists joined the society.

(3) The first regular meeting was held at Ahmedabad during the AIOS congress in 1968. At the executive committee meeting, a proposal to have the *society registered* was passed. This was done same year..

(4) The first activity of the new society was to hold a 7-days refresher course (workshop) on squint and other ocular motility disorders in September 1967 at Sitapur. It turned out to be very successful, probably because it was the first of its kind in India. Members who were mostly senior ophthalmologists attended it; some of them were fairly well known.

(5) Every year new elections were held and the management of the society changed hands. Somewhere around 1976 the society became defunct.
Note: Frankly speaking this is a drawback in the democratic system that a lovingly conceived and nurtured institution / organization may die a premature death if it falls into indifferent hands.

(6) *Revival of the society* was proposed during a meeting (of old members and some other ophthalmologists), that was hastily arranged at the request of Dr. Sudha Awasthi-Patney in 1981 just after the conclusion of Dr. Nagpal's very successful National Symposium on squint. It was decided to revive the society during the next conference of AIOS and Dr. Sudha Awasthi-Patney was asked to be the convener and do it. New and old members gave their names to be enrolled again.
Dr. Awasthi-Patney unfortunately failed to attend the next AIOS conference in 1982 due to the sudden serious illness of Dr, Patney. She requested Dr. B.T. Maskati, the Hon. Gen. Secretary of AIOS to make an announcement that Dr. Awasthi-Patney can not come now but she will be sending circulars for a meeting of the society to be held later at Rajkot. She never knew what happened but Dr. Prem Prakash started a new society. It is no use going into the details now.

(7) At last the AISS was revived in 1996. At present there are 88 members but out of them only 29 *are members in good standing (having paid at least upto year 2000*). Only 11 members have paid for 2001.

3. *About the courses*

(a) *Fellowship*: Theory part is now to be sent in 15 installment of 50-100 pages each as the X installment having 5 parts was extended to 334 pages. The number of installments was raised from 11. Apart from the theory part, some practical experience has to be gained at the Orthoptic / Ocular Motility Clinic, Rajkot. The period of the practical experience has to be determined by the fellows themselves but a minimum of 1 month is preferable.
(b) *Diploma* (to be started soon): Detailed information on request.
(c) *Certificate of* Proficiency: If the ophthalmologists / strabismologists wish to get some practical experience only, as many of them did when I was at Sitapur Eye hospital, they are welcome. They will be given a testimonial (Certificate of Proficiency) for the period of their stay here. There will be no fees.

4. *About the workshops / Refresher Courses*

We are going to have a hands-on workshop on strabismus and amblyopia from September 13-19, 2002. Turn over to page 7 for details.

5. *About InteRyc, the News-Letter-Update of the society:*

(A) At present it is being published every three months. Previously it was coming out every two months. If we revive the Indian Orthoptic Journal that had been started by Dr. Sudha-Awasthi Patney and Dr. J.M. Pahwa in 1963 at Sitapur, the InteRyc may have to be discontinued. We have an alternative plan also. Please read the item 6 below.
(B) It is sent free to every member of the AISS and JKAI but the subscription for membership must be sent every year. *Only 11 members have sent the 2001 subscription (that should have been sent on January 1, 2001.*
(C) If the subscription for 2001 is not received by September 30, 2002, I am sorry to say that it will not be possible to send the InteRyc until the subscription is received. I wish I had enough money to keep on sending them free of cost.

6. *About the **proposed revival** of the Indian Orthoptic Journal*: Action on this proposal is being delayed because I had asked for members' views about the replacement of the InteRyc by the Indian Orthoptic Journal. So far very few responses have been received. Your views are important because the InteRyc is a quarterly publication and the Journal will be published once a year. Secondly, the matter in a journal is useful in a different way than that in a news letter-update. I would like to know which one do you think you would find more useful. One member has suggested that both should be published. The matter is under consideration. The journal is going to be started soon but whether it should replace the InteRyc has to be decided.
I invite members to come forward for the job of honorary member of the editorial board.

ATTENTION

1. **The hands-on workshop on strabismus and Amblyopia is going to be held from September 13 through 19, 2002. The short outline of the program and other information is given on the next page.**
2. *The CME quiz-No*.2, 2002 is included in this volume. Please answer it, cut along the dotted line and send it back by mail. The answers to the CME quiz- No.1, 2002 are given after that.

The questions in each quiz are drawn from the material given in that particular issue of the InteRyc under the headings of Strabismus Summary Series, Update, InformIT and Short Review article on Strabismus etc.

3. *Member of the year is chosen on the basis of overall performance during that year, including the answers to the quiz.*

4. The *update questionnaire* is printed on the back of the CME quiz. *Please do answer it if there is any change or addition in the information about phone No., FAX number, mobile phone number, pager number, E-mail address or a web-site address. When I try to call the members on phone I find that many numbers have been changed.*

5. *Background of the Indian Orthoptic journal*: Dr. Sudha Awasthi (Patney) was inspired greatly by her teacher Mr. T. Keith Lyle (read about him under the heading of "In fond memory" on the inside of back cover). He stressed the need of making the subject of strabismus popular among ophthalmologists and campaigning for early diagnosis in infants and children to prevent amblyopia. After coming back to Sitapur Eye Hospital in 1961, she conceived the idea of bringing out an Indian Journal of Orthoptics on the lines of the British Orthoptic Journal. Dr. J.M. Pahwa (who liked the idea and agreed to look after the practical aspect) and Dr. Awasthi (Patney) started the journal in 1963 and looked after it as the editor and the joint editor respectively until her departure from Sitapur in 1972. Dr. Pahwa continued publishing it until a few years back. About 2 and one 1/2 years back he asked Dr. Sudha A. Patney if she would like to restart publishing the journal to which she replied in the affirmative. Late Dr. Pahwa then sent some old papers relating to the society sometime back.
The journal would probably replace the InteRyc, as it will be difficult to publish both unless there is a managing editor assisted by an editorial board.

6. *The fees for the whole of theory part of fellowship course* are now Rs.1500 *including the mailing charges*. The mode of mailing each installment is either by registered A.D. post or by couriers, mostly by the latter as it is faster. However, couriers do not go to all the places. Moreover, an installment sent by the courier did not reach a fellow and I sent another one by registered A.D. post. Now therefore, we shall have to send them by post despite more expense involved.

7. *The usual procedure of sending the installments*: Installments are sent one by one accompanied by the relevant question paper. The fellow has to answer the questions and send the answer sheet back, on receipt of which the next installment of the course is sent. Previously the fees had to be sent for one installment at a time. This has been changed to save the fellow's time, effort and postal expenses. It is now payable in one lump sum, in advance in the form of a demand draft for Rs1500, in the name of Dr. S.A.Patney, S/B account No.4256 at UCO bank. As explained in earlier InteRycs this is a no profit-some loss venture.

8. *The membership subscription for year 2002* became due on 1st January 2002. Members, who do not pay the subscription for the year 2001 by the end of June 2002 (extended date) will not be sent future InteRycs. This is because of financial constraints. Despite subsidizing the expenses we are finding it hard to keep afloat. The members, therefore, *are requested to send it soon* (please see the Update questionnaire on the back of the Member of the Year 2002 Quiz 1). *Now the book-post charges have become Rs.7 (another steep rise from Rs.3 only a couple of years ago).*

9. *The list of members who have paid at least upto 2001, is given in table 1 on page 8.*

IMPORTANT NOTE:

Please see the note on the next page.

(a) All the members whose names are not given in this list (see table 2), are requested to send two years subscription (for 01 and 02). It can be in the form of a demand draft for Rs.200 OR cheque for Rs.236, in the name of Dr. S.A.Patney, UCO bank S/B account No. 4256, Rajkot.

(b) Members who have paid for 2001 but not for 2002, are requested to send one year subscription only, DD for Rs.100 / cheque for Rs.118 only.

*(c) InteRyc volume 3, 2002 will not be sent to members whose **2001** subscription will not be received by September 30, 2002.*

Sr. No.	JIM No.	Name of the member	Paid for	Sr. No.	JIM No.	Name of the member	Paid for
1	1	Dr. AKS Rathore	2002	9	45	Dr. Dolly Tandon	2001
2	3	Dr. R.M. Sahai	2001	10	50	Chhaya Shinde	2002
3	19	Dr. Venogopal G.	2002	11	77	Dr. Beant Singh	2002
4	23	Dr. Ravindra Khirwadkar	2002	12	79	Dr. Ashok K. Chakrabarti	2001
5	30	Dr. Mohan Paranjpe	2002	13	82	Dr. Tejas Mehta	2001
6	36	Dr. T.K. Sharma	2002	14	83	Dr. U. Mukhopadhyaya	2001
7	39	Dr. S.K. Pal	2002	15	84	Dr. Nandish Shah	2002
8	43	Dr. Meenakshi Bajpai	2001				

NEWS

(1) The hands-on workshop is going to be held on September 13-19, 2002 at Patney Eye Clinic, Rajkot. The details are given on page 9 and registration form on pages 11-12.

(2) Last call for entries for 2001 contests: *Entries are invited for the following contests*:

1) *Teleconference*: Papers are invited on any subject concerning strabismus, amblyopia, nystagmus or other disorders of ocular motility and binocular vision. The best paper will be awarded Dr. H.L.Patney Memorial Trophy, Rs.2500 in cash and a testimonial to the effect.
2) *Eye-Rhyme*: Entries are invited for short poems in English / Urdu / Hindi. The subject for the poem is "eyes". Any type of poetry in which the word is mentioned will qualify for the contest. The best poem will get a prize of Rs.250 in cash, a cup and a testimonial.
3) *Cartoon*-Eye: Please enter your cartoon for the Cartoon-Eye contest latest by September 30, 2002. Any subject concerning the eyes is acceptable. The best cartoon will get cash prize of Rs.250, a cup and a testimonial.
4) *Remembering series quiz*: What is the name of the strabismologist who invented a muscle transplant procedure (named after him) for horizontal muscle palsy?

Note:
(1) *The member of the year will be chosen on the basis of the over all performance (taking part in discussions, replying to queries, making suggestions, taking part in contests etc) not only by the results of the quarterly CME quiz).*
(2) The entries should reach us latest by September 30, 2002. The amounts of cash prize in items 1 and 2 have been reduced to Rs. 2500 and Rs250 respectively, due to poor quality of entries. Please do your best.

The hands-on workshop on strabismus and Amblyopia

Introductory words:

The main feature of this workshop is the delegate participation, a real hands-on thing! You may call it "a wet lab". The so-called workshops concluded in one day are NOT REALLY workshops. They are just refresher courses / revision in theory. But this workshop means practicals done by participants themselves. *Because the theory is being covered separately, we shall not be wasting time in this workshop on something that can be looked up any time in a book. The other subjects can be learnt just by watching the Video CDs but not strabismus and amblyopia. Surgery forms only about a fourth of the whole complex treatment of strabismus and amblyopia. It is a complex subject and one has to cultivate the habit of investigating, watching, thinking, imagining, guessing, theorizing and deducing, all at one time. This subject needs dedication. It is so challenging that there is not a dull moment in an ocular motility clinic. Every case is different. I find the other subjects so boring. One looks at a case and straight away diagnoses it as cataract or RD and advises surgery and that's it.*
It is not so in squint. Only people who do not have any knowledge of the subject can take the attitude of saying this is squint, let us operate and get done with it. One who knows it, will automatically start thinking about the possible cause and will try to find the exact time of onset so that a guess can be made about the state of binocular function. For being able to do this, we have to imagine and construct a mental picture (a movie in fact) of the various processes that have been going on, other processes that have been disrupted and the remaining time that will still permit development. After all this and more, we have to reconstruct the full picture by bringing together all the various pieces of information collected, fit them carefully like we do in a jig-saw puzzle. Then only we can make a fairly accurate guess of the prognosis. The word "prognosis" means the chances of recovery of 100% visual acuity and full binocular functions, not just straightening the eyes. Please do not apply the criteria used in cataract and retinal detachment cases. They can be unilateral also. One eye does not have to do much with the other eye in the sense that having cataract in one does not mean that the defect is in both eyes. But in squint this applies all the time. As a matter of fact, even the so-called good eye is not good at all. It develops sensory defects too.
For learning this subject of strabismology and orthoptics one has to be a doctor (ophthalmologist), a neurologist, a strabismologist, a dreamer, a dedicated worker, a lover of children, a philosopher (thinker) and a logician. One has to develop and cultivate a unique way of thinking with guessing and reasoning going on at the same time.

I have let go of members who I thought were not serious about the subject and right now we can boast of having a very select membership of whom many are dedicated strabismologists.

Registration fee: Rs.1000 for 7 days / Rs.150 per day
(Note: This system of paying for 1 day has been decided on because some members may like to attend on certain days only, say for the first or last 3-4 days depending on their preference for certain subjects. The registration form is given on pages 11-12.

The program of the workshop:

(NOTE: During the sessions methods of examination will be demonstrated and then the delegates will examine the variety of cases, which have been carefully chosen and called for this purpose. Please see table 2).
Dates: September 13-19, 2002 (September 13-15: Heterophoria and horizontal strabismus)
(September 16-18: Vertical strabismus, musculofascial anomalies and Video CDs showing examination of patients and rectus and oblique extraocular muscle surgery + power point presentations on case reports of surgery of Pattern strabismus and a new modification of recession of rectus extraocular muscle surgery that makes it extremely easy and safe even in less experienced hands).
(September 19 morning session: discussion of problem cases, question- answers)

Program: of the hands-on workshop has already been sent twice.

COMING UP

(1) July 21-25, 2002: 7th International Conference on Low Vision, Goteborg, Sweden. Contact: Conference Secretariat, Congrex Goteborg AB, Att: Vision 2002, Box 5078, 402 22 Goteborg, Sweden. Ph.: +46 (31)-81-82-00; FAX: +46 (31)-81-82-25; email: vision2002@gbg.congrex.se; Web-site: www.congrex.com/vision2002.

(2) July 22-25, 2002: *XXIII Pan-American Congress of Ophthalmology, Buenos Aires, Argentina. Contact: Pan-American Association of Ophthalmology PAAO* Administrative Office, 1301 South Bowen Rd., Ste. 365, Arlington, TX 76013-2286, USA. Ph.: +1 (817)-265-2831; FAX: +1 (817)-275-3961; email: paao@paao.org.; Web-site: www.paao.org.

(3) August 15-17, 2002: Sixth European Society for Out Patient Eye Surgery (ESOPES), Lausanne, Geneva, Switzerland. Contact: Bovet Jerome, M.D., 15 av Bois de la Chapelle, 1213 Onex, Switzerland. Ph.: +41 (22)- 879-12-34; FAX: +41 (22)-793-85-87; email: jbovet@monoeil.ch.

(4) September 7-11, 2002: XX Congress of the European Society of Cataract and Refractive Surgery, Nice, France. Contact: ESCRS, 10 Hagan Court, Lad Lane, Dublin 2, Ireland; Ph.: +353 (1)-661- 8904; FAX: +353 (1)- 678-5047; email: escrs@agenda.comm.ie.

(5) September 13-19, 2002: Hands-on workshop on squint and other ocular motility disorders. at {Dr. H.L. Patney Eye Clinic, Rajkot. Members are allowed to pay on the per day basis to be able to attend on certain days only without suffering monetary loss. Fill up the Registration form on page 9 and send immediately to Dr. S.A. Patney, 10 Bhaktinagar Society, Rajkot-260 002, India. Phone No. (0281)-362838: FAX NO.; (0281)-221399; e-mail: sawasthi6@yahoo.com and sawasthi6@Hotmail.com.

(6) September 19-20, 2002: United Kingdom and Ireland Society of Cataract and Refractive Surgeons Annual Meeting, Chester, England. Contact: UKISCRS, Secretariat, c/o ENTER, North Riding Infirmary, New Court Road, Middlesborough, TS1 5JE, England. Ph.: +44 (1642)-854054; FAX: +44 (1642)-231154; email: ukiscrs@onyxnet.co.uk.

(7) September 26, 2002: Second Educational Program of the European Contact Lens Society of Ophthalmologists (ELSO), Bordeaux, France. Contact: Florence Malet, Chair of SFOALCCHU Bordeaux Service Ophthalmologique, Hospital Pellegrin, Palace Amelie Raba-Leon, 33076, Bordeaux Cedex, France; Ph.: +33 0-5-56-79-87-75; email: florence.malet@santesurf.com.

(8) September 28-October 2, 2002: The 20th Annual Vitreous Society and the 35th retina Society Joint Meeting, Sa Francisco, California, USA. Contact: Karen Baranick, Medical Conference Planners, 1251, post Road, Scarsdale, NY 10583, USA, Ph.: +1 (914)-722-0664; FAX: +1 (914)-722-0465; email: medconfs@aol.com; Website: www.medconfs.com.

(9) October 17-23, 2002: 10th International Congress of the SASCRS on Cataract and Refractive Surgery, Sun City, South Africa. Contact: Christi Truter, Secratariat, PH. And FAX: +27 (12)-66674220.

(10) October 20-23, 2002: *Annual American Academy of Ophthalmology Meeting, Orlando, USA. Contact:* Ph.: +1 (415)-561-8500 extension 304; FAX: +1 (415)-561-8576.

(11) November 3, 2002: New Laser Techniques Meeting, Hamburg, Germany. Contact: Universitasklinkum, Hamburg-Ependorf, Klinik kum polyklunk fur Augeneilkunde Martinistr. 52, 220246, Hamburg; Ph.: +49 (40)-428-03-2301; FAX: +40 (40)-428-03-4906; email: augenklinik@uke.unihamburg.de.

(Strabismus Summary Series and update columns will follow later in this volume)

InformIT

By: Mr. Sameer Shah, Technical IT advisor to the JKA Institute of Strabismology

(NOTE: Mr. Shah is a teacher at the NIIT, Rajkot, one of the famous institutions that is imparting training in the subject of Information Technology (IT). He was my teacher at NIIT. We are fortunate to have his help in this series on IT. In this installment he gives some extremely useful information about WAP technology).

WAP Technology.

Ever had an uncontrollable urge to check your share prices right in the middle of nowhere when you were armed with nothing but a pocket PC? Ever lost a business deal because you checked your e-mail a tad too late? Been in a situation where you felt totally helpless, almost on the verge of insanity, because you simply had to check your mail, but all you had was a mobile phone? If these are problems that have been plaguing you, it's time you tried out a solution called WAP (Wireless Application Protocol).

Devices such as personal digital assistants (PDAs), handhelds and cellular phones were not originally thought of as connectors to the Internet. But technology has changed all that. Bluetooth, 3G, WAP, iMode — all these are making it possible for you to access the Internet from your mobile device.

WAP is the oldest and the most prominent among these technologies. It is also responsible for the hype that surrounded the mobile Internet when the concept was first introduced. Most people got carried away and started dreaming about surfing the Web in its full glory on the mobile phone! In reality, mobile devices are more suitable for receiving Web clippings (information in the form of tickers) such as stock quotes, weather and news briefs, rather than actual browsing.

Pros

- Don't need a PC each time you want to check mail
- Cheaper to purchase as compared to a laptop
- Ideal for getting specific information in the form of tickers or Web clippings
- As easy to use as a mobile phone
- You can store site addresses and username and password details without having to type them again and again

Cons

- ✞ WAP devices have small screens, so viewing pages is tiring for the eyes
- ✞ Can access only those sites that have a WAP interface or are coded in WML
- ✞ Typing on these devices is difficult due to the small keypads
- ✞ Poor software availability

✞ Expensive as compared to just a mobile phone and more difficult to maintain

SHORT REVIEW ARTICLE ON STRABISMUS

NONPARALYTIC-INCOMITANT DEVIATIONS: DUANE'S RETRACTION SYNDROME PART 2

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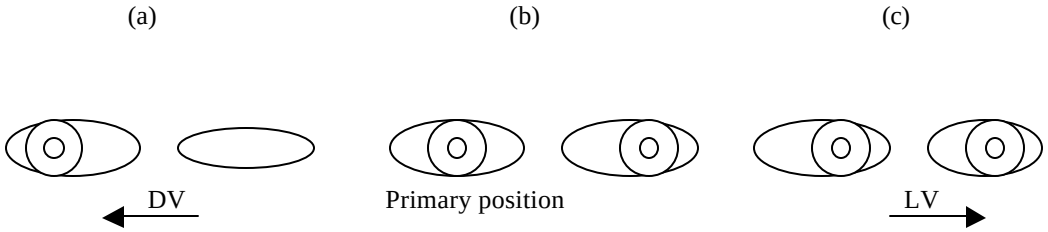
(This short review article is presented in 2 parts. The first part was published in InteRyc volume 1, 02)

Clinical picture of type II DRS

- ⇨ *Compensatory head posture*: Face-turn away from the affected side to place the eyes in a position where binocular single vision can be achieved and maintained
- ⇨ *Deviation: Exotropia* in primary position, increasing in the direction of *adduction* of the affected eye (figure 4)

Figure 4, DRS type II, left eye (diagram matic representation):



(a) Gross limitation of adduction of left eye is associated with narrowing of Palpebral fissure.
(b) Large exotropia in primary position, (c) almost normal abduction of left eye and widened LPF.
Electromyography: Electrical activity seen in lateral rectus during adduction and abduction.
Legend: DV= Dextroversion; LV= Levoversion; LPF= Left palpebral fissure.

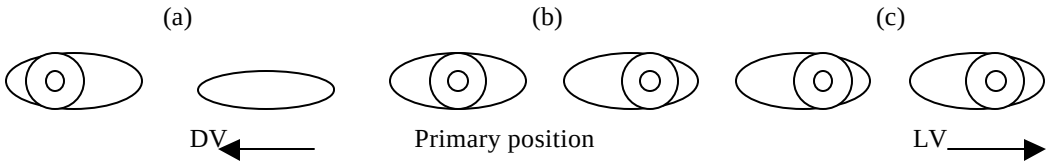
- ⇨ *No significant deviation, slight esodeviation or slight exodeviation* in the direction of *abduction* of the affected eye
- ⇨ *Secondary angle of deviation (fixing with the affected eye) is more than the primary* (fixing with the normal eye).
- ⇨ *Ocular motility: Narrowing of the palpebral fissure* in adduction
- ⇨ *Retraction of the eye ball* in attempted adduction
- ⇨ *Absence or marked limitation of adduction*
- ⇨ *Abduction normal or slightly limited*
- ⇨ In some cases *upshoot in adduction*
- ⇨ *Electromyography*: It shows electrical activity in the lateral rectus muscle on the affected side during adduction as well as abduction.

Clinical picture of DRS type III

- ⇨ *CHP*: Usually absent, if present, it would be in milder cases in the form of a face turn to the side away from the affected side because of exotropia in primary position (figure 5).

- ⇨ *Deviation: Exotropia*, usually large in primary position and larger in the direction of attempted adduction.
- ⇨ *Ocular motility: Severe limitation of adduction and abduction* both, but adduction is usually worse.
- ⇨ *Narrowing of the palpebral fissure* in adduction
- ⇨ *Retraction of the globe* in attempted adduction
- ⇨ Sometimes *upshoot* in attempted adduction.
- ⇨ *Electromyography*: Electrical activity is seen in both horizontal muscles (medial and lateral rectus) both during adduction and abduction.

Figure 5, (diagrammatic representation)**,** DRS type III, left eye:



(a) Absence of adduction OS and synergistic divergence of both eyes on attempted adduction of left eye, (b) Large left exotropia, (c) Limitation of abduction OS.
Electromyography: Electrical activity is present in both horizontal muscles in adduction as well as abduction.
Legend: DV= Dextroversion; LV= Levoversion

Investigations

Apart from a thorough *orthoptic examination* including measurement of deviation in various directions of gaze and sensory-motor status of the eyes, one should carefully look for and rule out the *presence of various ocular and systemic anomalies* that have been reported in cases of Duane's retraction syndrome. Each case of Duane's syndrome should be submitted to a *thorough ocular and physical examination*.
The ocular and systemic anomalies reported in cases of Duane's syndrome are as follows:

(1) Ocular anomalies[41 and 42]

- ♦ Anomalies of the pupil and iris (heterochromia, dysplasia of the iris stroma
- ♦ Anomalies of the lens (cataract)
- ♦ Anomalies of the choriod (coloboma)
- ♦ Persistent hyloid arteries
- ♦ Anomalies of the lids (dystichiasis)
- ♦ Crocodile tears (gustolacrimal reflex)
- ♦ Microphthalmos
- ♦ Marcus Gunn Jaw Winking

(2) Systemic anomalies[41 and 42]

- ♦ Goldenhar syndrome

- Dystrophic defects, e.g., Klippel-Feil syndrome
- Arthrogryposis multiplex congenita
- Cervical spina bifida
- Cleft palate
- Facial anomalies, e.g., facial hemiatrophy
- Sensorineural hearing deficits (perceptive deafness)
- Malformations of external ear
- Chiari I malformation
- Anomalies of limbs, feet and hands

Special points regarding orthoptic examination of a case of Duane's syndrome:

⇨ *History*: Quite often the deviation is not noticed in a child with Duane's syndrome by the parents because of the presence of a compensatory head posture. It has also been seen that the manifest deviation in primary position may come later on. A history of compensatory head posture in early childhood or infancy is important as it gives a clue to the congenital nature of the oculomotor anomaly.
A history of orbital/ocular trauma, head injury and ocular or extraocular surgery should be particularly inquired into.
Not only a family history of Duane's syndrome may be present but one should also inquire about the presence of any congenital ocular or systemic anomalies in the family.

⇨ *Compensatory head posture* (CHP): One should always be on the look out for a CHP and correlate it with the type of ocular oculomotor anomaly.

⇨ *Visual acuity* (VA) is tested with and without compensatory head posture (CHP) in each eye. If the limitation of movement is gross and the eye does not even come to the primary position true assessment of VA is only possible with CHP. The face is turned so that the test types are in line with the visual axis and the affected eye can fix them with the fovea.

⇨ During a *cover test* one should notice particularly if the deviation is incomitant (with angle of deviation varying in different directions of gaze and fixing with either eye). A cover test in various positions of gaze will help in recognizing the incomitant nonparalytic nature of the strabismus. In the case of palsy a large angle of deviation is present if there is a significant degree of paralysis. In the case of Duane's syndrome, however, the angle of deviation is not proportional to the degree of limitation of movement. It is comparatively much smaller or even absent (type I DRS).

⇨ While testing the *ocular motility* when there is a restriction or limitation of a movement it is wise to make sure by occluding the other eye and making the affected eye fix. In cases of an apparent limitation the affected eye will move to take up fixation when made to fix.

- ⇨ Particular note should be made of the *narrowing and widening of the palpebral fissure* and the direction in which it occurs. Usually the narrowing always occurs in adduction and widening in abduction.

- ⇨ One should always watch out for the *retraction of the eyeball (globe*), which also occurs in adduction.
- ⇨ *Measurement of the angle of deviation* either on the major amblyoscope or with prism bars should always be done in various cardinal directions of gaze. The advantage of a major amblyoscope is that an assessment of binocular functions can be made more accurately. If they are found to be absent in primary position the patient is allowed to adopt his compensatory head posture (CHP). Many a times it will make it easier to fuse and have stereopsis too.

- ⇨ *The Worth Four Dots test* or any other diplopia test should be done for near and distance and may be normal with CHP and abnormal without it.

- ⇨ *Stereoacuity* should also be tested with and without CHP.

- ⇨ *Hess chart* will show a typical chart in which the field of the affected eye is much smaller than that of the unaffected eye. This field resembles that of an eye with ocular palsy with the important difference that the deviation in the primary position is much smaller than that present in an eye with a significant or even gross limitation of movement due to ocular palsy.

- ⇨ *A Forced duction test* should always be performed to clinch the diagnosis. *It should be repeated intraoperatively and postoperatively to estimate the degree of tightness of the muscle under examination.*

- ⇨ Other tests like *electromyography* can be performed if the facilities are available but they are not essential for making a diagnosis of Duane's syndrome. *If the clinical picture is typical, along with a positive Forced duction test it is almost invincible as a proof of a correct diagnosis.*
  However, electromyography does help in confirming or otherwise the presence of anomalous synergistic or paradoxical innervation in the antagonists (the medial rectus and the lateral rectus) or in one of the horizontal muscles and one of the vertical muscles.

NOTE: Depending on the findings of electromyography and the forced duction test giving a fairly good estimation of the tightness of the muscle one should have a pretty accurate idea of whether the innervational or the structural causes are to blame in a particular case. This will help in deciding the line of treatment and the prognosis.

- ⇨ Tests like CT scan and/or MRI are helpful as they show the anomalies in the muscles.

Management

(1) Management of Duane's syndrome is essentially surgical apart from *correction of the refractive error and treatment of amblyopia.*
(2) *Prisms* have been advised for correcting a compensatory head posture by moving the position of BSV from the side to the primary position. However it is not a commonly used option and can not be used if the CHP is marked or there is no BSV in any direction as is the case in cases of type III DRS.
(3) *Surgical treatment is the only effective mode of management of Duane's syndrome but it should only be carried out if indicated strongly.* It is discussed in the following text.

Surgical treatment of Duane's retraction syndrome:

This is one of the most challenging conditions as nothing, that is possible at the present time, can achieve a cure. *The main points are given below.*

- In children one should wait until the age of 6 years[32] when they can be observed in school to see if the surgery is indicated.
- Every patient must be warned that it is impossible to restore full movements in all the directions.
- Undercorrections are quite common and overcorrections can not be ruled out.
- One should take all precautions to avoid causing a weakening of adduction and convergence leading to consecutive exotropia.
- If there is binocular single vision in primary position with a slight or moderate but unnoticeable head posture, surgery should not be undertaken.
- *Surgery should only be performed if there are strong indications for it, which are as follows:*

1) A significant *deviation* in primary position without CHP

2) A *significant compensatory head posture* (CHP) which is uncomfortable to adopt and which is a cosmetic problem.

3) Moreover, if there is a *marked CHP during growing years spinal problems* like scoliosis may develop. In fact we consider it an important indication for surgery.

4) Marked narrowing of the palpebral fissure and marked retraction of globe can be serious cosmetic problems.

5) Marked upshoot or downshoot can look pretty ugly. In severe cases the cornea disappears under the lids and the resulting look is just unacceptable.

- Surgical procedures in use:

It is obvious that various surgeons prefer different procedures but in the case of Duane's syndrome there are not many procedures to chose from. The procedures that are being generally used are:

1) Recession of the horizontal recti of the affected eye
2) Recession-resection procedures on the normal eye
3) Posterior fixation sutures in the horizontal recti
4) Bi-recession of horizontal recti in the affected eye for retraction and upshoot etc.
5) Y procedure on the lateral rectus for the upshoot etc.

- Planning the surgery[43-46]

1. Consider if it necessary to operate on account of one or more indications being present.
2. Take into account all the clinical findings, the result of forced duction test and electromyography (if available) and decide the type of procedure most likely to improve the condition. For instance, if electromyography indicates a slowing of saccades of medial rectus in adduction because of a cofiring of the lateral rectus muscle in adduction, it is wise not to do a recession of the medial rectus.

- Contraindications and things not to be done:

(a) It is better not to do large recessions of medial rectus muscle (more than 6 mm) if one wishes to avoid consecutive exotropia.

(b) If there is a limitation of medial rectus function, even slight, a recession should be avoided.

(c) As mentioned earlier, if the electromyography shows slowing of the saccades in medial rectus during adduction a recession should be avoided.

(d) The lateral rectus muscle should never be resected as it may make the retraction of the globe, the narrowing of the palpebral fissure and the limitation of adduction worse. Quite often the forced duction test is positive in abduction also indicating the presence of a hard and tight medial rectus muscle. The test is almost always positive in adduction as the lateral rectus is very often fibrotic short and tight.

In fact resection procedures should be avoided on the affected eye altogether as the medial rectus also is often found to be fibrous and tight.

(e) As mentioned earlier weakening the obliques for the upshoot or the downshoot in adduction does not usually help[16 and 48] recession of the lateral rectus alone or along with medial recti (in case of orthotropia in primary position) or even Y splitting of the lateral tendon improves the condition[49].

(f) Do not operate on both the eyes as the postoperative results can not be predicted with any degree of certainty and operating on the affected eye may make a significant difference.

- Surgical options for different types of cases of Duane's syndrome with various feature-combinations:

Duane's retraction syndrome type I

(1). *DRS type I with esotropia measuring 25-30 prism diopters (PD) in primary position and a face turn towards the affected side:* Usually a recession of medial rectus of 6 mm on the involved side improves the condition considerably.[43-45]

(2). *If the esotropia is greater than 30 PD and the saccadic velocity in adduction is almost normal:* Recession of medial rectus more than 6 mm may be considered. Personally, I do not like recessing the medial rectus more than 5 mm in children and more than 6 mm in adults even in non-mechanical strabismus. If 6 mm recession does not suffice the medial rectus of the other eye can be recessed as a first or a second stage procedure.

(3). *If there is esotropia of more than 30 PD but the saccadic velocity in adduction is slow:* The medial rectus should not be recessed more than 6 mm if one wishes to prevent postoperative exotropia. If 6-mm recession is considered insufficient, a recession of the medial rectus of the normal eye may be undertaken. Personally, I do the other eye as a second stage procedure because the results of operating on a tight fibrotic muscle are quite unpredictable.

(4). *If the angle of esotropia is very large:*

(a) A resection of the lateral rectus of the normal eye is added to the recession of the two medial recti.
(b) A muscle transposition procedure on both eyes according to Kestenbaum has been recommended[50] especially *if the face turn is extreme.*
(c) Transposition of vertical rectus muscles' insertions to sclera near the insertion of lateral rectus muscle has been reported to be effective.[51 and 52] A significant improvement in abduction was reported along with face turn, angle of deviation and the field of binocular fixation (binocular single vision). However, further limitation of adduction was a complication in a large percentage of the patients in one of these series.
(d) A modified version of the option in (c) has been suggested[53] whereby the vertical recti are put on adjustable sutures to avoid causing vertical strabismus as a complication of this procedure.

Duane's retraction syndrome type II

1. *If there is exotropia in primary position and a CHP (face turn towards the sound side):* A recession of the lateral rectus of the affected side[44, 46 and 47] should be done to improve the cosmetic appearance and decrease the deviation.

2. *If the exotropia is too large for lateral rectus recession alone:* A lateral rectus recession of the affected eye is combined with lateral rectus recession of the sound eye and if necessary a medial rectus resection also of the sound eye.

3. *If* there is *upshoot and/or downshoot* of a marked degree: Weakening of the obliques does not help.[16 and 48] Weakening of the horizontal recti by recession or even Y splitting of the affected lateral rectus muscle[49] often improves the condition.

Duane's retraction syndrome type III

Treatment of type III presents a lot of difficulty, as there is restriction of both, adduction (severe) and abduction. There is exotropia in primary position getting worse in adduction and esotropia in abduction of the affected eye.
Posterior fixation suture has been recommended.[54] It can be combined with recession of the horizontal rectus muscles of the sound eye.

Marked upshoot or downshoot of the affected eye

NOTE: Inferior oblique weakening has not been found effective in getting rid of this deforming feature.[16 and 48] The various effective options are given below:

1) *If there is exotropia in primary position:* Recession of a very tight and fibrotic lateral rectus on the affected side may be effective in reducing the upshoot and downshoot by decreasing the "leash effect". It also reduces the exodeviation.
2) *If there is no deviation in primary position:* The medial rectus has also got to be recessed along with the lateral rectus to prevent an iatrogenic (postoperative) esotropia in primary position. This means that both the horizontal muscles that are actually antagonistic in function undergo the same procedure of weakening (recession). It is obvious that the medial rectus recession is to balance the effect of lateral rectus recession.
3) *If there is esotropia in primary position:* The recession of the medial rectus has to be larger than the recession of the lateral rectus so that there is reduction of esodeviation as well as the up and downshoot.
4) Another procedure that is said to be effective is the *splitting of the lateral rectus tendon and reinserting it*[49] *in the shape of "Y"* (figure 6). This procedure can be combined with lateral rectus recession in DRS type II.
5) Yet another procedure that is being used to reduce the up and downshoot in adduction is the *"posterior fixation suture" in the lateral rectus muscle,*[48] placed as far back as possible. However, it is a more difficult procedure especially with hard and fibrotic muscles.

Cosmetically intolerable retraction of the globe in attempted adduction:

If there is marked and ugly looking retraction of the globe and narrowing of the palpebral fissure: Recession of both horizontal rectus muscles reduces their co-contraction and thus improves the appearance.

In the presence of a significant deviation in primary position steps to correct the deviation can also be taken at the same time.

Summary of the surgical treatment of Duane's retraction syndrome

- Each case needs individualized evaluation for a carefully planned surgery to avoid complications.
- A variety of procedures have been advocated but the sheet anchor is still simple recessions of the horizontal rectus muscles.
- No surgery can lead to full ocular motility.
- Forced duction test must be repeated pre, intra and postoperatively.
- Postoperative motility exercises should be given in all cases.

Summary of Duane's retraction syndrome

Prevalence reported*:* About 1% of strabismus cases

Etiology-the present views*:*

(1) Hereditary
(2) *Embryopathy*: The basic cause may be a teratogenic factor in the 8^{th} week of conception.
There seems to be a brain stem lesion leading to aplasia or hypoplasia of the abducens nucleus causing VI C N palsy.
(3) *Structural anomalies* of the muscles involved but they may be secondary in nature.
(4) *Neurogenic theory*: Innervational anomalies leading to paradoxical innervation of the antagonists (medial rectus and lateral rectus, possibly of other muscles as well).

Clinical features and Huber's classification based on electromyographic studies*:*

1. Type I: Absence or gross defect of abduction, slight or no defect of adduction, narrowing of palpebral fissure and retraction of globe in adduction are typical features and sometimes there is upshoot/downshoot in adduction. *Electromyography* shows electrical silence in lateral rectus and significant activity in medial as well as lateral rectus in adduction (paradoxical innervation of the two muscles).

2. Type II: Marked defect of adduction, slight or none in abduction narrowing of palpebral fissure and retraction of globe in adduction and sometimes upshoot/downshoot in adduction. *Electromyography* shows electrical activity in lateral rectus during adduction and abduction.

3. Type III: Absence of adduction and marked defect of abduction, narrowing of palpebral fissure and retraction of globe in adduction and upshoot/downshoot in adduction. *Electromyography* shows electrical activity in both horizontal muscles in both adduction and abduction.

Treatment is mainly surgical but should not be undertaken unless there is a definite indication like a strabismus in primary position, unsightly head posture, cosmetically intolerable upshoot/downshoot and/or narrowing of palpebral fissure.
NOTE: Photographs of the patients suffering from Duane's retraction syndrome will be given later in the chapter containing the case reports of some of the interesting cases.

Details of the surgical procedures mentioned in this chapter will be detailed later in the chapter on surgery.

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STRABISMUS SUMMARY SERIES PART XVII

In this XVII part of Strabismus Summary Series the topic of "Getting familiar with orthoptic instruments is continued.

Getting familiar with orthoptic instruments: Part 3

This series will not only deal with instruments for use in orthoptic / ocular motility clinics / strabismologists' offices but also in those ophthalmologists' offices who are even slightly interested in diagnosing strabismus and other ocular motility disorders.
I wonder if it ever occurs to the ophthalmologists that very often they have not been able to help their patients suffering from eyestrain because they could not diagnose that the cause was a muscle imbalance and not glasses only.
We shall now take up the instruments one by one to give a brief description of each of them (please refer to the list of instruments that was given in InteRyc volume 4, 2001 on page 9). In the following text we shall describe in short the more useful and the more commonly used instruments named in the list.

MADDOX WING

Figure 1, Maddox Wing in use

Maddox Wing is used for measuring the angle of deviation for near in cases of heterophoria. It is a subjective test and the degree of deviation can be read off the scales, in degrees of horizontal, vertical and cyclorotational (torsional) deviations (see figure 1) in a few minutes. Presence of fusion is a pre-requisite for the use of this instruments and if it breaks down on dissociating the two eyes as in cases of intermittent strabismus / decompensated heterophoria, this instrument is of no use. Presence of constant suppression also renders it useless.

Description of the instrument

The instrument consists of a black / grey (the usual colors) rectangle with a horizontal white scale and a vertical red scale. In the lower right hand quadrant of the rectangle

there are two arrows, one white colored is vertical (for horizontal deviations) and the other red colored is horizontal (for vertical and torsional deviations). The names of deviations are printed on the scales. Two dividers, one in a saggital position and the other in an oblique position are meant to dissociate the two eyes in such a way that right eye can see only the arrows and the left eye only the numbers. When dissociated, the eyes deviate and the degree and the type of the deviation can be read off the scales. One end of horizontal red arrow can be moved up and down to make an angle with the horizontal scale (meant for horizontal deviations).

Method of use:

If there is a horizontal deviation the vertical arrow seems to be moving. The range of this movement depends on the degree of deviation. One should take the reading when the arrow stops moving. The white number where the arrow stops is read off the horizontal scale. Even numbers are for exophoria and odd numbers denote esophoria. Similarly the vertical deviation is measured on the vertical scale with red numbers.
If there is a cyclodeviation, the arrow, though actually straight (horizontal) and parallel to the horizontal scale, appears tilted to the patient so that it is not seen parallel to the horizontal scale. It can be made to look parallel to the horizontal scale by putting it at an angle by moving it in the right direction. The outer end of the red arrow when moved appropriately (up / down) gives the reading of the degree of cyclodeviation which can be read off a third scale (vertical and small) given at the right edge of the rectangle, below the horizontal scale.

The main advantage of Maddox Wing:

It can be effectively used for screening cases of heterophoria in a short time. The degree of deviation gives an indication as to how much strain it can cause during close work. Apart from diagnosing and measuring heterophoria for treating it I use it as a routine in cases of presbyopia to see if the high plus glasses cause significant exophoria with reading glasses. If they do, the patient is likely to get strain with the correction after reading for a short time only. If I find that exophoria is more than 6, I consider it capable of causing strain. Similarly reduction / increase in the degree of esophoria / exophoria with various types of glasses can be diagnosed by this simple and inexpensive instrument and managed accordingly.

(To be continued in volume 3, 2002)

UPDATE

Note: Update contains abstracts/short outline of the articles that are of clinical interest and that have been recently published in the medical/ophthalmic literature. The abstracts given below have been taken from the Internet.

Update-General Medicine

1. *Alzheimer's disease: High-calorie diets loaded with fats may increase the chances of developing* the disease in people with a genetic predisposition for memory-robbing Alzheimer's disease. (By Dr. Jose A. Luchsinger and colleagues: Archives of Neurology 2002:59:1258-1263): The results of this new study at Columbia University suggest that people with apolipoprotein E e-4 (Apo e-4), a genetic variant linked with Alzheimer's disease, who consume the most calories and fat are twice as likely to develop Alzheimer's compared with those consuming the least amount. This is not true for those who do not carry Apo e-4. In those without Apo e-4, there was no link between fat, calories and memory loss. There are three types of the apolipoprotein E gene (e-2, e-3 and e-4) and people generally have two copies of the gene, one inherited from each parent. Those with one or two copies of Apo e-4 have a substantially increased risk of Alzheimer's disease, though some individuals with the gene never develop the disease.
The authors conclude that the current findings suggest "the possibility of modifying the risk of Alzheimer's disease with caloric restriction and low-fat diets in susceptible individuals."

Update-General ophthalmology

1. Impact of cataract surgery on motor vehicle crash involvement by older adults (By Owsley C, McGwin G Jr, Sloane M, Wells J, Stalvey BT, Gauthreaux S.: JAMA 2002 Aug 21;288(7):841-9): CONTEXT: Motor vehicle crash risk in older drivers is elevated in those with cataract, a condition that impairs vision and is present in half of adults aged 65 years or older. The object of this prospective cohort study was to determine the impact of cataract surgery on the crash risk for older adults in the years following surgery, compared with that of older adults who have cataract but who elect to not have surgery. CONCLUSIONS: In our sample, patients with cataract who underwent cataract surgery and intraocular lens implantation had half the rate of crash involvement during the follow-up period compared with cataract patients who did not undergo surgery. Cataract surgery thus may have a previously undocumented benefit for older driver safety, reducing subsequent crash rate.

Update-Strabismology

1. *The association of strabismus and aphakia in children* (By France TD, Frank JW. J Pediatr Ophthalmol Strabismus 1984 Nov-Dec;21(6):223-6): Strabismus was present in 40% of patients with cataracts/dislocated lenses at the time of initial diagnosis and continued to present an obstacle to complete rehabilitation with 86% of the congenital patients and 61% of the acquired patients found to have strabismus at their latest post therapy visits. The type of horizontal deviation found at the initial examinations was distributed equally between esotropia and exotropia in the unilateral congenital cataracts patients. However, all of our patients with strabismus and bilateral congenital cataracts were esotropic. The acquired group was heavily weighted toward the exodeviations at the time of the initial examination and during treatment showed an even greater percentage of exotropia. Visual acuity results in the various groups followed perhaps the expected trends with the poorest results in the unilateral congenital cataract patients. Those patients in the acquired groups have better visual

results with 56% of the traumatic and 83% of the non-traumatic eyes achieving vision of 20/70 or better. Despite the high incidence of strabismus present in these patients, we feel this should in no way be a deterent to the decision to initiate therapy as it does not seem to relate to visual acuity results. The overall good visual results in these patients justify the approach of early surgery, adequate correction, and vigorous occlusion.

2. *Refractive surgery for refractive errors which cause strabismus. A report of 8 cases* ((By Nemet P, Levenger S, Nemet A.: Binocul Vis Strabismus Q 2002, Fall;17(3):187-90): PURPOSE: While excimer laser refractive surgery is a well known procedure for correcting refractive errors, its use in adult patients with accommodative or partially accommodative esotropia who wish to remove their glasses, and those with high anisometropia and exotropia has not been extensively studied. We report our experience treating these two conditions with refractive surgery. CONCLUSIONS: Refractive surgery is effective in treating accommodative and partially accommodative esotropia in adults and in cases of myopic anisometropia with exotropia.

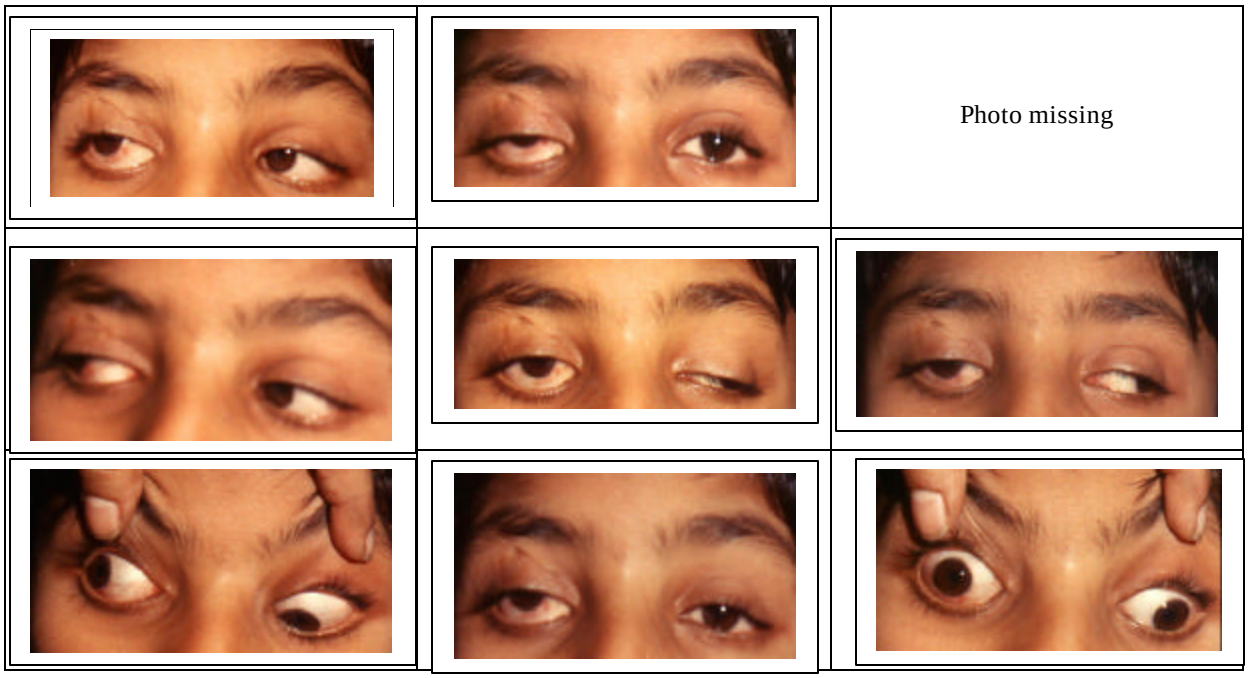
3. *Optimization of laser-solder repair technique for possible application in strabismus surgeries* (Davis JB, McNally-Heintzelman KM. : Biomed. Sci. Instrum. 2002, 38:351-356): Strabismus is the lack of binocular vision due to an inability to control one of the eye muscles. Corrective surgery is the most common recourse and consists of adjusting and reattaching the extraocular muscle to the sclera. In approximately 10% of cases involving re-insertment of the extraocular muscle via suture techniques, the needle is inserted too deeply into the eye resulting in perforation of the retina. Fibrin glues and cyanoacrylates have been substituted with unsatisfactory mechanical results. The goal of this study was to maximize the tensile strength of rabbit extraocular muscles repaired using a laser-solder technique developed by McNally et al., Biodegradable polymer membranes of controlled porosity were fabricated and doped with protein solder. In vitro tissue specimens were repaired using the solder-doped polymer membranes in conjunction with an 805 nm diode laser. The tensile strength was tested on an MTS machine and results were analyzed with the Student's T-test. (Results are not given)

4. *Incomitant strabismus associated with instability of rectus pulleys* (Oh SY, Clark RA, Velez F, Rosenbaum AL, Demer JL.: Invest Ophthalmol Vis Sci 2002 Jul; 43 (7) : 2169-78): PURPOSE: Connective tissue pulleys serve as functional mechanical origins of the extraocular muscles (EOMs) and are normally stable relative to the orbit during gaze shifts. This study evaluated pulley stability in incomitant strabismus. CONCLUSIONS: Pulley instability, resulting in EOM sideslip during ductions, occurs in some cases of incomitant strabismus. Resultant patterns of strabismus may depend on static pulley positions, pulley instability, and coexisting globe translation that alters pulley locations relative to the globe. Translational instability of pulleys and the globe could produce abnormalities in actions of otherwise normal EOMs, and connective tissue disorders causing these instabilities should be considered as potential causes of strabismus.

SPOT THE DIAGNOSIS (5)

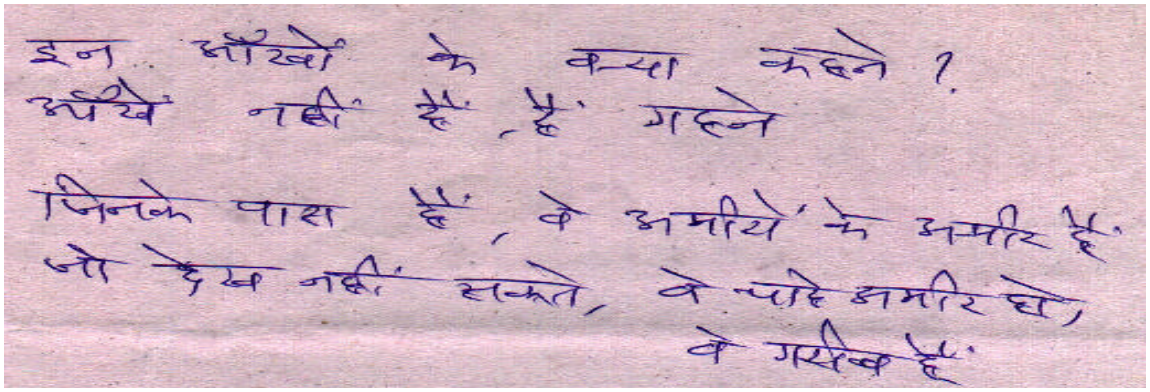
Note: Please have a good look at the composite photographs given below and write to us your diagnosis, your name and JIM number.

Ocular motility chart of a patient:



EYE-RHYME

(Dr. Chhaya Shinde)



BOOK SELECTION

This column is left empty as we have not come across any good new book on strabismology / related subjects. Members are requested to let me know if they do.

CARTOON-EYE
(Dr. S.A.Patney)

I bet he is staring at me

He is staring at me!

One of the disadvantages of having a strabismus
(A comic-tragic situation)

HISTORY-A FEW FIRSTS IN STRABISMOLOGY

Worldwide

(a) Chevalier John Taylor (1703-1772) who performed a successful operation on a boy did first surgery for squint. He was half surgeon and half quack. He must have realized that squint was a disturbance of muscular equilibrium and conceived the idea that dividing a muscle or a nerve can cure it. However, he earned a bad name through many failures, one of them being on the eyes of Bach, the famous musician.
(b) In 1743 George L. Buffon recognized amblyopia and recommended occlusion for it.
(c) In 1839 Johann F. Dieffenbach performed the first successful tenotomy.
(d) du Bois-Reymond (1952) and Mackenzie (1954) were the first to suggest orthoptic treatment but it was elaborated and established as a technique by Javal (1864-96).
(e) Prof. A. Bangerter of Switzerland and Prof. C. W. Cuppers of Germany first advocated pleoptic treatment for amblyopia. However, their approach was different.

(Continued overleaf on page 26)

CME (Member of the year) Quiz no.2, 2002:

(NOTE: Please encirc le the appropriate number or letter, fill in the blanks or describe as required. Then cut along the black line and return by mail. Turn over for the update-questionnaire)

1. *Please enumerate the advantages of WAP technology*:
   (1) .
   (2) .
   (3) .
   (4) .
   (5) .

2. *Please circle the correct answer:*
   (a) Maddox Wing is meant for measuring the deviation in Heterotropia: Yes / No
   (b) Removal of refractive error by surgery can help in controlling certain types of squints: Yes / No
   (c) Unstable rectus pulleys can cause incomitant strabismus: Yes / No
   (d) Surgery for Duane's retraction syndrome should wait until the patient is at least 6 years old: Yes / No

3. What are the main features of Duane's retraction syndrome type II:
   (a) .
   (b) .
   (c) .
   (d) .
   (e) .

4. *Name the* main features of Duane's retraction syndrome type III *:*
   (A) .
   (B) .
   (C) .
   (D) .
   (E) .

5. *The main procedures used in the surgery for Duane's Retraction syndrome are:*
   (1) .
   (2) .
   (3) .
   (4) .
   (5) .

HISTORY-A FEW FIRSTS IN STRABISMOLOGY

In **India**

(Continued from previous page)

(A) Dr.H.L.Patney started running an orthoptic clinic with the help of a compounder at Sitapur Eye Hospital whom he taught orthoptic exercises, in early nineteen fifties.
(B) Dr. M.K. Mehra and Dr. Sudha Awasthi (now Patney) started the first Orthoptic clinic at K.G. Medical College, Lucknow in 1957. She ran it for 2 ½years.
(C) Dr. H.L. Patney started the first Orthoptic Department and the first Orthoptic School of India at Eye hospital, Sitapur, U.P. in 1959 and Dr. Awasthi (now Patney) Pleoptic dept. in 1961.
(D) Dr.Sudha Awasthi and Dr. J.M. Pahwa started the first Indian Orthoptic Journal in 1964.
(E) Dr. H.L.Patney and Dr. Sudha Awasthi started the All India Strabismological Society in 1967 and held India's first workshop on strabismus in 1967.

Please answer the questions or encircle the correct answers, cut along the black line and send by return mail)

Update questionnaire

1. I have been receiving InteRyc regularly, sent 2 monthly in 1998 (6 volumes) and 3 monthly (4 volumes) since 1999: Yes / No
2. My address remains unchanged: Yes / No
3. My email address: My URL:
4. My phone No.: My FAX No.:
5. My pager No.: My mobile phone No.:
6. I am enclosing herewith a demand draft for Rs100 / *cheque* for Rs118 (year 2002 subscription) / DD for Rs200 or *cheque* for Rs218 (for the years 2001+2002) / DD for Rs 300 or *cheque* for Rs318 for 2000+2001+2002.
7. I would like to resign from the membership of AISS and JKAIS: Yes / No
   If answer is yes, please write the reason if you don't mind. It may help to improve our system.
8. My membership No. is: JIM-
9. My name and present address are:

For fellowship candidates only:

10. I have paid for …….. installments.
11. I have received ……..Installments.
12. I have sent back solved question papers of …… installments.
13. I have the following problems with the course (please attach a sheet if required):

14. I have paid membership subscription for the years 98 / 99 / 00 / 01/02 / all (97-02)
15. I would like to come for the hands on experience in the month of …… 2002.
    (*Please inform at least 3-4 months in advance for arrangements to be made*)
16. I would like to attend the workshop in September, 02 for 4 days (from 16-19) / 7 days (from September 13-19).

NOTE: Rate your performance yourself is printed on page 31 and registration form for the hands-on workshop is given on page 32 and. Information about the Hands-on workshop is printed on page

RATE YOUR PERFORMANCE YOURSELF

The results of the "CME Quiz NO.1, 02 and those of "Spot the Diagnosis" No.1, 02 are given on this page.

Correct answers to the CME Quiz no.1, 2002:

(NOTE: Please encircle the appropriate number or letter, fill in the blanks or describe as required. Then cut along the black line and return by mail. Turn over for the update-questionnaire)

1. *Please give a list of the minimum number of instruments required by an ophthalmologist*:
   (6) Test types for adults and children, for near and distance
   (7) Prism bars
   (8) Titmus/Random Dots stereotest
   (9) Worth Four Dots Test Drum (for distance) and Torch (for near)
   (10) Fixation targets (small interesting toys, some of them moving / making noise)

2. *Please enumerate the test types that can be used for preschool children:*
   (e) .Linear and isolated E optotypes
   (f) .The Beale-Collins picture test types
   (g) .Kay pictures
   (h) .Allens cards
   (i) .Sjogren's isolated hand test types
   (j) .HOVT charts

3. *Are the following statements true?*
   (a) Encircle the correct answer (yes/no):
   (b) SIH (Spontaneous Intracranial Hypotension) can cause cranial neuropathies: Yes
   (c) Weakening all the four oblique muscles is feasible in cases of DVD: Yes
   (d) Embryopathy can cause Duane's Retraction syndrome: Yes
   (e) A posteriorly inserted medial rectus acts better as an adductor rather than as retractor bulbi: No

4. *Please fill in the blanks:*
   (1) Bilateral asymmetric DVD can mimic unilateral DEP
   (2) To keep a group of words together, hold down Ctrl and shift while hitting the space bar.
   (3) Electromyographic studies indicate the cause of Duane's syndrome to be neurological rather than structural.
   (4) Co-contraction of medial and lateral recti in Duane's retraction syndrome's is due to Paradoxical Innervation.

5. *The main features of Duane's Retraction syndrome are:*
   (a) Significant/marked/gross restriction/absence of abduction
   (b) Often a mild/moderate limitation of adduction
   (c) Narrowing of the palpebral fissure and retraction of the globe in adduction
   (d) Widening of the palpebral fissure and slight protrusion of the globe in abduction
   (e) Upshoot or downshoot in adduction
   (f) A deviation is always present in the direction of restriction of motility but may be absent in primary position in certain c ases.

SPOT THE DIAGNOSIS No.1, 2002

Correct answer: Right lateral Rectus / CN VI Palsy

REGISTRATION FORM

For the hands-on workshop of JKAI and AISS (September 31th-19th, 02)

(Please type or write in block letters and circle your choices)

Dr. _____ ; JIM No.: _____

Mailing address: _____

_____

Phone No.: Res.: _____ Office: _____

FAX No.: _____ Mobile No.: _____

Pager No.: _____ email: _____

I wish to attend the workshop from September ___ to ___ (Day 1 / 2 / 3 / 4 / 5 / 6 / 7)
(please circle your choice of days and dates)

I would like a single / double room at 260-400 / 500-900 / 1000-1400 / 1500-1900 /day

I am enclosing herewith a bank Demand Draft / Cheque No. _____ dated _____

For a total sum of Rs. _____ (in words) _____

Drawn on _____ Bank at (town/city) _____
made payable to: Dr. S.A.patney, S/B account No. 4256 on UCO Bank, Wania Vadi branch, Rajkot. The total includes registration fee (at Rs.900 / 1000 for 7-days / 150 per day for days) and hotel charges for days.
(NOTE: The registration fee will be Rs.900 if received here before September 10th, 2002. It will include lunch for 7 days + 2 dinners, one on September 12th and another on September 18th)

I prefer meals of: Punjabi / English (continental) / Chinese style (for lunch box)

(For JKAI office use only)
Name : JIM No.:

Date of receipt of the registration form and the DD / cheque No.: dated

Drawn on Bank at

For a total amount of Rs.

Please fill in the form, cut along the dotted line and send immediately by mail / courier to:

Dr. S.A.patney
10 Bhaktinagar Society, Rajkot-360 002; Phone: +91-281-362838. FAX: +91-281-221399.
E-mail: sawasthi6@hotmail.com & sawasthi6@yahoo.com; Website: www.geocities.com/sapatney/

JK A Publications

No man's land