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InteRyc-volume 1, January, February and March, 2003

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ALL INDIA STRABISMOLOGICAL SOCIETY

JKA Institute of Strabismology and binocular Vision

Address in India: 10 Bhaktinagar Society, Rajkot-360 002. Phone: +91-(281)-2362838.

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

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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: Prevent strabismus and amblyopia in children

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.

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

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 undergraduate 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 of the Orthoptic Department), 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 a formal inauguration of a training center 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. AS already mentioned, the Institute became functional in 1996 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 was circulated once only. It 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. A free squint camp (diagnostic and surgical) is held every year, usually in collaboration with the Rotary Club of Rajkot Midtown.

I. 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 (now Patney) 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, I have recently realized that 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 cannot 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 up to year 2001***)**. Only 11 members have paid for 2002.

3. *About the courses*

(a) *Fellowship*: It is a correspondence course. Theory part is sent in 15 installments of 50-100 pages each, either by **conventional mail or by E-mail**. The fellowship candidate can make the choice. 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 on the basis of their experience and expertise in the subject but a minimum of 1 month is preferable. The very minimum for somebody with some working knowledge of the subject is one week. When you attend the clinic you will realize that actually 1 week is not enough even for a workshop as those who attended the September 02 workshop found out.

(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 do, 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

Some of the members who could not attend the September 02 workshop have asked me to hold another one soon. I shall see if it can be done. Summer would have been a good time if it was not for the severity of summer in Rajkot. It is the time when maximum number of surgeries are performed as children get a 2-3 months holiday from school but it is also the time when temperatures soar to 42-44 degrees C and the sun is very hot.

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 conceived by Dr. Sudha-Awasthi Patney and started with the help of Dr. J.M. Pahwa in 1963 at Sitapur, the InteRyc may have to be discontinued. We have an alternative plan also.

(B) It is sent free to every member of the AISS and JKAI but the subscription for membership must be sent every year for it to be economically viable.

6. About the **proposed revival** of the Indian Orthoptic Journal: We had sent an opinion poll form in the InteRyc volume3, 02. I am sorry to say we have received very few replies in the form of poll-forms completed and sent back). I appeal to the members to please opine on the subject.

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 3 years back he asked Dr. Sudha A. Patney if she would like to restart publishing the journal to which she replied in the affirmative. The journal would probably replace the InteRyc, as it will be difficult to publish both. The whole set-up has to change as for a good journal there has a managing editor assisted by an editorial board.

ATTENTION

1. *The CME quiz-No.*1, 2003 is included in this volume. Please answer it, cut along the dotted line and send it back by conventional mail. The answers to the CME quiz- No.4, 2002 are also included in this volume.
2. *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. *Fellowship course fees:* Now the total amount to be paid in one lump sum is Rs.1500 *including the mailing charges, if sent by conventional methods.* 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, once an installment sent by the courier did not reach a fellow and I sent another one by registered A.D. post. Now therefore, we prefer to send them by registered post despite more expense involved. The course installments can also be sent by Electronic mail. The **fee for the full course of 15 installments if sent by electronic mail is Rs.900 or US $25. It will be like a full book on Strabismology but much cheaper than similar books available at around $150-200 or more. Moreover, one has to read it through in order to be able to answer the questions at the end of each installment.**

6. *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 **or $50 (for the course sent by conventional mail/courier) or Rs.900 (US $25) if sent by e-mail, by demand draft (certified check) 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.

7. *The membership subscription for year 2003* became due on 1st January 2003. Members, who did not pay the subscription for the year 2002 by the end of December 2002 (the final extended date) will not be sent future InteRycs until their subscription is received. As soon as due subscription is received the InteRyc will be sent. 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 the subscription for 2002 and 2003 soon.*

Information about due subscription:

(a) *All the members who have not even paid for 2001 are requested to send three years subscription (for 01, 02 and 03). It can be in the form of a demand draft for Rs.300 OR cheque for Rs.320, 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 two years' subscription, as that for 2003 became due on the January 1, 2003. Please send DD for Rs.200 / cheque for Rs.220 only.*

(c) *Members who have paid up to 2002 but not for 2003, are requested to send one year subscription, as that for 2003 became due on the January 1, 2003. Please send DD for Rs.100 / cheque for Rs.120 only.*

NEWS

There are no news as I have not received any. The names of the prizewinners of the year 2002 have not been decided as there was hardly any competition. I am considering including the papers that were presented at the workshop-02. What is your advice? I have to ask for a sort of a poll on this subject, as this involves a change in policy.

Workshop 02

The person entrusted with this job has been unable to compile the report. We are sorry for this inordinate delay. Actually the clinic has been extra-busy and none of us has any time left from work in the clinic. One reason is my absence for four months. Second reason is the increasing awareness of the public about squint and amblyopia, at least in this region.
However, I shall try to get all the papers from the person concerned.

COMING UP

1. *6/3/2003 - 9/3/2003: American Glaucoma Society Annual Meeting, San Francisco, CA,* contact Denise De Losada Wilson, American Glaucoma Society, P.O. Box 193940, San Francisco, CA 94119-3940; (415) 561-8587; fax: (415) 561-8531; e-mail: ags@aao.org.

2. 18/3/2003 - 1/4/2003**:** 24th Pan-American Congress of Ophthalmology, San Juan, Puerto Rico. *Contact:* Spectrum Negroni & Associates, Phone: (787) 708-2100; Email: mjlandrau@spectrumdms.com

3. *18/3/2003 - 22/3/2003: American Society of Cataract and Refractive Surgery 2005 Annual Symposium and Congress, San Francisco, CA,* contact ASCRS, 4000Legato Rd., Ste. 850, Fairfax, VA 22033; (703) 591-2220; fax: (703) 591-0614; e-mail: ascrs@ascrs.org.

4. 19/3/2003 - 23/3/2003: *Fourth Annual International Glaucoma Symposium (I.G.S.), Barcelona, Spain;* contact the Symposium Secretariat, Kenes International, 17 Rues du Cendrier, P.O. Box 1726, CH-1211, Geneva 1, Switzerland; (41) 22-908-0488; fax: (41) 22-732-2850; e-mail: glaucoma@kenes.com.

5. *21/3/2003 - 23/3/2003: International Vision Expo, New York, NY;* contact Liz Lollis, Registration Manager, (203) 840-5954; fax: (203) 840-9954; e-mail: elollis@reedexpo.com

6. *12/4/2003 - 16/4/2003: American Society of Cataract and Refractive Surgery 2003 Annual Symposium and Congress, San Francisco, CA,* contact ASCRS, 4000Legato Rd., Ste. 850, Fairfax, VA 22033; (703) 591-2220; fax: (703) 591-0614; e-mail: ascrs@ascrs.org;.

7. *1/5/2004 - 5/5/2004: American Society of Cataract and Refractive Surgery 2004 Annual Symposium and Congress, San Diego, CA;* contact ASCRS, 4000Legato Rd., Ste. 850, Fairfax, VA 22033; (703) 591-2220; fax: (703) 591-0614; e-mail: ascrs@ascrs.org.

8. *2/5/2003 - 3/5/2003: First Annual International Society for Imaging in the Eye Meeting, Fort Lauderdale, FL,* contact: Registration Manager, toll-free 1-877-307-5225; phone: 856-848-1000; e-mail: meetingregistration@slackinc.com

9. *22/5/2003 - 24/5/2003: 8th Annual Florence Symposium on Cataract, Glaucoma and Refractive Surgery, Florence, Italy***,** contact: Registration Manager, toll-free 1-877-307-5225; phone: 856-848-1000; e-mail: meetingregistration@slackinc.com

10. *22/5/2003 - 24/5/2003: International Joint Meeting of the Italian Society of Ophthalmology, the Italian Association of Cataract and Refractive Surgery and OCULAR SURGERY NEWS, Florence, Italy,* contact: Registration Manager, toll-free 1-877-307-5225; phone: 856-848-1000; e-mail: meetingregistration@slackinc.com.

11. *6/6/2003 - 7/6/2003: First Annual Ocular Surgery News Symposium Glaucoma: Improving Your Odds, Las Vegas, NV.* It is to be held at The Venetian Casino Resort. Contact: Registration Manager toll-free: 1-877-307-5225; phone: 856-848-1000; e-mail: meetingregistration@slackinc.com

12. *15/11/2003 - 18/11/2003: American Academy of Ophthalmology 107th Annual Meeting, Anaheim, CA; For information*, contact the AAO, P.O. Box 7424, San Francisco, CA 94120-7424; (415) 561-8500; fax: (415) 561-8533; e-mail: meetings@aao.org.

13. *ONGOING: Axial Eye Length Biometry, Flourescein Angiography, Diagnostic B-Scan, and Visual Field Fundamentals, San Francisco, CA; contact:* Denice Barsness, CRA, COMT, ROUB, Eye Education, 2060 Sutter Street #306, San Francisco, CA 94115; Phone: (415) 921-8595; Fax: (415) 775-8826; Email: denicebars@worldnet.att.net.

STRABISMUS SUMMARY SERIES PART XIX

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

Getting familiar with orthoptic instruments: Part 5

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 Rod (continued from InteRyc volume 4, 2002)

(Note: We regret a mistake in this column of the InteRyc volume 4, 2002. Please read "horizontal" instead of "vertical" where the direction of the grooves of the Maddox Rod are described for measuring horizontal heterophoria. The red line that forms is always perpendicular to the direction of the grooves)

We continue here the uses of Maddox Rod after a short summary of previously printed matter.

- *This is another instrument based on the principle of diplopia. One object (a small light) is seen double. The second image is in the form of a red line, which is perpendicular to the grooves and rods of the Maddox Rod.*
- *Used in cases of heterophoria, it is quite handy, easy to use and reliable in patients with normal retinal correspondence.*
- *All three types of heterophoria, horizontal, vertical and torsional, can be measured with Maddox Rod.*

Description: The device is quite small, made of glass consisting of multiple rods. Each groove separates two rods. The whole thing is fitted in a round frame. It easily fits in a slot in the trial frame and is the size of trial lenses. The usual color is red, which is preferable to white that is used much less often.

Uses:

1. One Maddox Rod used in conjunction with prisms to measure the degree of heterophoria, both vertical and horizontal.
2. Two Maddox Rods are used to measure cyclophoria
3. It can give an idea of the type of retinal correspondence (if there is a manifest deviation but the patient says the line is in front of the light there is obviously abnormal retinal correspondence of the harmonious type.

Methods:

1. Measurement of heterophoria:

(a) Measuring horizontal heterophoria: The use of Maddox Rod for measuring the horizontal heterophoria has already been described in InteRyc volume 4, 2002. Now its other uses are discussed in short. The grooves are to be horizontal so that a vertical red line is formed that gets horizontally displaced if there is an exodeviation or an esodeviation. Using horizontal prisms this vertical line is brought in front of the spot-light. One just has to remember that the image is displaced towards the apex of the prism.

(b) Measuring vertical heterophoria: The basic procedure is the same as that for horizontal heterophoria. However, the direction of the grooves has to be vertical in this case so that a horizontal red line/band is formed. Vertical prisms are used to displace the line vertically if it is not seen by the patient in front of the spotlight. Either a prism bar or loose prisms can be used. The step by step procedure is as follows:

(1) The measurement is done fixing each eye in turn. The eye that looks at the light is the fixing eye. The eye that looks through the Maddox Rod is the deviating eye. The usual routine is to measure the deviation fixing the right eye (RE) first. That means the deviation of the left eye (LE) is being measured. This is followed by measurement of the deviation of the right eye (while the LE is fixing).

(2) To measure vertical heterophoria the Maddox Rod is placed with its grooves vertical, in front of the non-fixing eye, which is the left eye while the patient looks through the RE at a small (muscle/spot) light at 6 meters distance.

(3) The patient is asked whether he can see a vertical red line (with the red Maddox Rod).
(4) If the answer is in the affirmative, he is asked which side of the light the red line is seen.
(5) If he sees the line above the light (with the left eye) when RE is fixing, there is *right hyperphoria*, if on the other hand the line is seen below the light there is *left hyperphoria (right hypophoria)*. The diplopia is produced when the two eyes are dissociated by placing Maddox Rod in front of one eye. The same procedure is repeated with LE fixing but reversed, i.e., Maddox Rod is now in front of the right eye and the light in front of the LE. The lower line belongs to the hyperphoric eye.

(To be continued)

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.

Update-General ophthalmology

(1) Comparison of 5% povidone-iodine solution against 1% povidone-iodine solution in preoperative cataract surgery antisepsis: a prospective randomised double blind study (By Ferguson AW, Scott JA, McGavigan J, Elton RA, McLean J, Schmidt U, Kelkar R, Dhillon B., Br J Ophthalmol. 2003 Feb;87(2):163-7): The authors summarized their study as follows: Povidone-iodine (PI, Betadine) is routinely used as a preoperative topical antiseptic in cataract surgery as it has been shown to reduce the incidence of postoperative endophthalmitis. However, the concentration used clinically is variable. In vitro studies have shown that PI is paradoxically more effective at lower concentration. This study was undertaken to determine if this effect was reproducible in vivo. CONCLUSION: Despite in vitro evidence of higher bactericidal efficacy of PI at more dilute concentrations, 5% PI is more effective than 1% PI in decreasing the human conjunctival bacterial flora in vivo, particularly in the presence of heavier initial bacterial load.

(2) Anaesthesia-related diplopia after cataract surgery (By Gomez-Arnau JI, Yanguela J, Gonzalez A, Andres Y, Garcia del Valle S, Gili P, Fernandez-Guisasola J, Arias A., Br J Anaesth. 2003 Feb;90(2):189-93): Authors studied the incidence and clinical characteristics of persistent diplopia related to anesthesia for cataract surgery in a general hospital. RESULTS: During the study period, 3450 cataract surgeries were performed by phacoemulsification and 137 by extracapsular extraction. Retrobulbar block was used in 2024 cases, peribulbar block in 98, topical anesthesia in 1420 and general anesthesia in 43. Twenty-six cases of persistent diplopia were found (0.72% incidence), nine of which (0.25%) were considered to be related to anesthetic factors; five of the latter involved the left eye. Five were caused by paresis of the inferior rectus muscle and three by fibrosis. In one patient, the inferior oblique muscle was

affected. Anesthesia was by retrobulbar block in eight cases (0.39%) and by peribulbar block in one. No diplopia was found in patients who had topical or general anesthesia. Treatment was with surgery in two patients and with prisms in six. One patient continues to be studied. CONCLUSIONS: Persistent diplopia can occur after cataract surgery using retrobulbar block predominantly through direct damage to the inferior rectus muscle. The overall incidence of anesthesia-related diplopia in this series was 0.25%.

Update- Strabismology

1. *The double-bellied inferior oblique muscle: clinical correlates* (By Deangelis DD, Kraft SP, J AAPOS. 2001 Apr;5(2):76-81): We previously reported an 8% incidence of double-bellied inferior oblique (IO) muscles at the surgical capture site (10-12 mm from insertion) in cadaveric specimens. This companion study sought to determine how often this anomaly is encountered at surgery for clinically overacting IO muscles and whether clinical findings or surgical outcomes in cases with double-bellied muscles differ from those with single-bellied muscles. RESULTS: Among 162 patients (247 eyes) who underwent this surgery, 77 (77 eyes) had unilateral surgery and 85 (170 eyes) bilateral. Twenty-seven (10.9%) of the 247 muscles had double bellies. Among all variables compared, only the incidence of fundus excyclotropia differed significantly between groups, occurring more often in eyes with double-bellied IO muscles (48% vs 27%; P =.041). The efficacy of weakening surgery in reducing overactions was similar in both groups. CONCLUSION: The finding that eyes with double-bellied IO muscles showed a higher incidence of fundus excyclotropia suggests that the presence of a second belly may alter the physiologic action of the IO muscle.
2. *Graves' ophthalmopathy: a rational approach to treatment* (By Wiersinga WM, Prummel MF, Trends Endocrinol Metab. 2002 Sep;13(7):280-7): Abstract: The past decade has witnessed great progress in our understanding of Graves' ophthalmopathy (GO), although its precise immunopathogenesis remains an enigma. Several clinical studies have provided a more rational basis for treatment of this distressing disease, which significantly lowers the quality of life. A management plan tailored to the patient's needs can be devised according to the severity and activity of the eye disease. In active GO, immunosuppression might be considered. The combination of intravenous pulses of methylprednisolone and retrobulbar irradiation improves eye changes in 88% of patients, and is well tolerated. Once the disease has become inactive, rehabilitative surgery could be performed (orbital decompression, strabismus surgery and eyelid surgery, in that order). The patient should be reassured that functional and cosmetic improvement of eye changes is feasible, but restoration can require one to two years. To a certain extent, refraining from smoking prevents the development or worsening of GO.
3. *Congenital ptosis and amblyopia: a retrospective study of 130 cases* (By Dray JP, Leibovitch I., J Pediatr Ophthalmol Strabismus. 2002 Jul-Aug;39(4):222-5): PURPOSE: To provide supplementary data on the association between congenital ptosis and amblyopia. METHODS: In a retrospective chart study of 130 patients whose congenital ptosis was surgically corrected between 1987 and 1999, 27 (20.8%) had strabismus and 30 (23%) had amblyopia. In 9 patients (6.3%), it was not

attributable to any cause except ptosis. RESULTS: There was a high incidence (6.9%) of amblyopia in patients with congenital ptosis. CONCLUSION: We recommend early examination and follow-up of patients with congenital ptosis to diagnose and treat any subsequent amblyopia. Surgery may be indicated should stimulus deprivation amblyopia develop.

4. *Retractor lysis as prophylaxis for lower lid retraction following inferior rectus recession* (By Kim DB, Meyer DR, Simon JW, J Pediatr Ophthalmol Strabismus. 2002 Jul-Aug;39(4):198-202; quiz 235-6): The authors summarize their study as follows: Lower lid retraction is a frequent complication of inferior rectus recession, especially of larger amounts. METHODS: With an incision through the palpebral conjunctiva, the lower lid retractors were lysed at the same anesthesia as inferior rectus recessions in a total of 20 patients (24 eyes). Included are 10 patients (12 eyes) described earlier and presented here with extended follow-up. Inferior rectus recessions ranged from 2 to 10 mm (mean, 4.2 mm). RESULTS: No patient had clinically apparent lid retraction or subjective complaints of lid deformity. Results were stable for 1 to 89 months (mean, 24.8 months) of follow-up. Three patients developed symblepharon, but surgical repair was required in only 1 case. CONCLUSION: Lower lid retractor lysis is a simple, safe, and effective procedure to prevent the lower lid retraction associated with inferior rectus recession.

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. Here he describes, in short, WAP Technology after giving some helpful information about "Windows XP" and "Office XP". The Telephony on Internet will be published later.

News Flash

Microsoft is coming with it's new desktop Operating System and Office product "Windows XP" and "Office XP" respectively. The XP stands for experience. Windows XP will be expected at the end of this year. The new release of Microsoft Office "Office XP" expected sometime this year, will integrate Hotmail and MSN Messenger with Office's Outlook e-mail program. It will also include a new feature that automatically saves a document when a computer crashes.

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), handheld 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 usernames 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

(This series is to be continued)

SHORT REVIEW ARTICLE ON STRABISMUS

Nystagmus is the subject of the short review article on strabismus and related anomalies. It has being presented as a series in three parts. The first part appeared in InteRyc volume 3, 02, while the second part was covered in volume 4, 02. Here follows the third and last part of this series on Nystagmus.

Nystagmus part 3:

Surgical treatment

There are three main aims of surgery:

(1) *To correct / reduce disabling / noticeable CHP (compensatory or anomalous head posture)*: This is achieved by bringing the null zone to or nearest to the PP.

(2) *To improve the visual acuity by reducing the nystagmus*: This is achieved by dampening the ocular motility to increase the foveation fraction / period, leading to improvement of VA.
(3) *To reduce the oscillopsia*: This is also done by *reducing the nystagmus* by dampening ocular motility. Using the null zone also helps.

The experts have not decided upon the best time for surgery. However, Rosenbaum et al[62] have suggested the following guidelines:

1) *Congenital nystagmus with no strabismus*: Surgery can be postponed until school age (about 4 years) so that repeated orthoptic assessments have been made for the various findings to be reliable.
2) *Congenital nystagmus with strabismus*: Early surgery so that bifoveal fixation can be achieved.
3) *Acquired nystagmus with CHP*: At least 1 year is given so that information about stability and direction of nystagmus and CHP is fairly reliable.

Special precaution:

Every patient / parent should be explained in detail about the prognosis and a need to understand, anticipate and accept a realistic expectation of the result. As regards the results, undercorrection is quite common. A residual CHP which is not too noticeable should be accepted as a good result.

Pre-requisites of surgery:

A. Prism test should be performed to see if turning the eyes in a certain required direction (towards the null zone) is likely to help reduce the CHP and /or improve the visual acuity. Put the required power of prisms with apex towards the direction in which the eyes are to be turned by surgery. If the head becomes straight and /or visual acuity improves and nystagmus lessens one can go ahead with the surgery.

B. If null zone exists in one direction only (right or left) surgery will bring it to primary position and the CHP will be reduced. However, if the null zone exists in both the directions (right and left) and the patient keeps changing the face turn from right to left surgery is not indicated.

C. Visual acuity should improve with eyes in the null zone by at least 2 or more lines on Snellen's chart.

Planning the surgery

The following important information must be obtained before planning surgery for nystagmus:

(1) If nystagmus is accompanied by strabismus surgery has to be modified according to the type and degree of strabismus.
(2) If binocular functions are present, particularly a good fusion potential: When the usual recession-resection surgery is performed on all the four horizontal rectus muscles (Kestenbaum's procedure or one of its modifications) the chances of a consecutive heterotropia are minimal if fusion is present.[55]

Various surgical techniques used in cases of nystagmus

1. *Weakening procedures*: Usually recession of rectus muscles
2. *Strengthening procedures*: Usually resection of rectus muscles
3. *Recession-Resection* may be combined with posterior fixation (Faden) suture
4. Some people use *adjustable sutures*
5. *Surgery on cyclovertical muscles*: (a) for chin elevation / depression and (b) for head tilt. For head tilt surgery can be performed on cyclovertical muscles (recession-advancement /resection) or horizontal rectus muscles (supra or infraplacement as required (see under the heading of (1)c surgery for head tilt.

The exact nature and amount surgery is decided according to the following factors:

(a) The purpose of surgery
(b) Type of compensatory head posture (CHP)
(c) Degree of head turn
(d) Degree of reduction in VA
(e) Severity of nystagmus

(1) Surgery to correct / reduce disabling / noticeable CHP

As already mentioned this is achieved by bringing the null zone to or nearest to the PP.

(1)a: surgery for horizontal CHP:

Many options are available, most of them being modifications of Kestenbaum-Anderson procedure. They have been in use for many years.

Note: Most surgeons now do all the four horizontal rectus muscles at one sitting. If there is a strabismus accompanying the nystagmus, appropriate adjustments are made in the recession- resection procedures. Mostly, amount of the adjustments for the presence of *strabismus* has to be by guess.

The various techniques used are given below.

1) The Kestenbaum-Anderson procedure
2) The Parks' modification of Kestenbaum-Anderson[63] procedure
3) The classic + 50%

4) The classic + 60%
5) Pratt-Johnson's maximum surgery
6) Von Noorden's modification of Anderson's two-muscle surgery

In all Kestenbaum-Anderson procedures the lateral rectus of the abducted eye is recessed and medial rectus resected while the medial rectus of the adducted eye is recessed and the lateral rectus resected. The net effect of these is a turning of the eyes towards the direction of the face turn, thus straightening the face by a variable degree. The amount of recession-resection is different in various modifications. *Each of the above procedures will be described in short below*.

1) *The Parks' modification of Kestenbaum-Anderson procedure*: Also known as "The classic maximum", this has been the most often used procedure. The main points are as follows:

   - Recommended for a head turn of 20 degree or less.
   - The basic principle is the same, that is to say, the operation is done to turn the eyes towards the direction of the face/head turn.
   - All the four horizontal recti are tackled at one sitting.
   - Amount of recession-resection in each eye is given in table 51-3. It uses a dosage of 5-6-7-8 mm for the various four horizontal muscles. The amount of surgery is distributed in such a way that *each eye gets a total dose of 13 mm of surgery. In the adducted eye the MR is recessed by 5 mm and the LR is resected by 8 mm. In the abducted eye the LR is recessed by 6 mm and MR is resected by 7 mm*.

Table 51-3 (Surgery for face turn):

Kestenbaum-Anderson procedure & modifications	Degree of face-turn	Amount of recession of LR of abducted eye	Amount of resection of MR of abducted eye	Amount of recession of MR of adducted eye	Amount of resection of LR of adducted eye
Kestenbaum's procedure	Moderate	5 mm	5 mm	5 mm	5 mm
Anderson procedure	Moderate	4-5 mm		4-5 mm	
Parks' modification (Classic maximum)	20 or less[72]	7 mm	6 mm	5 mm	8 mm
Classic+40%	30 or more	40% more	40% more	40% more	40% more
Classic 60%	>45	60% more	60% more	60% more	60% more
(Continued)					

Calhoun & Harley[64]	Severe	9 mm	8 mm	7 mm	10 mm
Pratt-Johnson[36]	35	10 mm	10 mm	10 mm	10 mm
Spielmann's modification	Severe	Recession + Faden suture	Resection	Recession + Faden suture	Resection
Cooper & Sandall[71]	FT in degrees X 2 = FT in PD	Appropriate amount	Appropriate amount	Appropriate amount	Appropriate amount

- The name classic maximum was given due to the fact that in nineteen fifties the MR was not recessed by more than 5 mm.
- Preoperative and postoperative oculomyographic recordings have confirmed that the intensity of the nystagmus decreases in all directions and the null zone or the zone of minimal nystagmus is not only shifted nearer to the PP but also broadened[63].
- Undercorrections are common (Note: Therefore augmented modifications of Kestenbaum-Anderson procedure were suggested).

2) *The classic + 40% (Augmented modification of the Classic maximum)*[64]:
   - This procedure is recommended for more pronounced CHP: 45 degree or more[65] / 30 degree or more[66]). The surgical dosage is increased by 40%, hence the name.
   - The disadvantage of this procedure is the common occurrence of limitation of ductions[64 and 65] and rarely a new deviation (strabismus).

3) *The classic + 60% (Augmented modification of the classic maximum)*:

   ⇒ This procedure has been recommended[66] for a head turn of 45 degree or more.
   ⇒ 60% more surgery is done than in the classic procedure.
   ⇒ An undercorrection, resulting in a face (head) turn of 10-15 degrees should be acceptable to all (the surgeon and the patient).
   ⇒ The patients / parents should always be warned in advance about the possibility of undercorrection.
   ⇒ Limitation of duction is to be expected postoperatively because of the large recessions.
   ⇒ The effect may gradually wear off partially and re-operation may be required after about 6 years[67].

4) *Bietti and Bagolini's maximum surgery*

   ♦ First reported by Bietti and Bagolini[69] in 1960, all horizontal rectus muscles are operated upon. Each muscle gets a dose of 10-12 mm, whether it is recession or resection, whether it is a medial or lateral rectus muscle.

- ♦ It did not become popular for some time, then it was revived by Limon[69] in 1986.
- ♦ Pratt-Johnson recommends this procedure. He claims an absence of complications[55, 67]. In his patients fusion was never lost if it was present preoperatively. No overcorrection and a head turn to opposite side resulted postoperatively if there were no two null zones, one to the right and the other to the left. This technique is contraindicated if there are two null zones.
- ♦ The most suitable patients are those with presence of fusion, a single null zone congenital nystagmus with a head turn of 35 degrees or more.
- ♦ The best results were seen after 1 month.
- ♦ Undercorrection may follow after about a year.
- ♦ Von Noorden has also reported good results[69] with this technique.

5) *von Noorden's modification of Anderson's procedure or enhanced Anderson's operation*

- ✞ Anderson was the first surgeon to report recession of the pair of yoke muscles, one in each eye. For instance, in a case of face turn to the left the right lateral rectus and the left medial rectus are to be recessed 4-5 mm so that both the eyes are turned to left.
- ✞ Noorden recommends an enhanced version of Anderson's two-muscle surgery. He recesses each yoke muscle by 10-12 mm (instead of 4-5 mm as suggested by Anderson). He explains the advantage of this procedure as follows: After a maximum dose-four-muscle surgery (one of the modifications of Kestenbaum's procedure) if re-operation is needed to correct an undercorrection / recurrence of a face turn, it is difficult to decide the next course of action. All the four horizontal muscles have already been operated upon. By doing a 2-muscle surgery instead, the other pair of yoke muscles is still available for further surgery.[70]
- ✞ Because a recession of medial rectus results in more correction than a recession of lateral rectus, medial rectus (of the adducted eye) is recessed by 10 mm[70] and the lateral rectus (of the abducted eye) is recessed by 12 mm.
- ✞ Noorden has reported the effectiveness of enhanced Anderson's operation.[70]
- ✞ Good results[70] have been reported for the medium term and two unoperated horizontal muscles are still there.
- ✞ If there is a strabismus accompanying the nystagmus appropriate change in the amount of recessions is made.

6) *Spielmann's modifications of Kestenbaum-Anderson procedure*:

Spielmann suggested[72] this procedure for CHP of more than 20 degrees. Posterior fixation suture is added to the recessed muscles.

7) *Surgery for nystagmus associated with strabismus*

- ∗ There are three options:
  - A. *One stage surgery*: One has to guess about the dosage of the amount of surgery for nystagmus and *strabismus*. This plan is quite unpredictable[75] but in our experience it does work more often than not.

B. *Two (or more) stage surgery*: Surgery for CHP is carried out on the fixing eye in the first stage. In the second stage the *strabismus* is corrected.
C. One or two of the muscles to be operated are given adjustable sutures so that the result can be modified after operation.

(1)b Surgery for vertical CHP[79]

- Vertical CHP (to reduce vertical nystagmus) is much less common than the horizontal. Few reports are available, none of them after long-term studies.
- For chin elevation the surgery is carried out to move the eyes upwards. This is done by recession of inferior rectus muscles and resection of superior rectus muscles.
- For chin depression the eyes are moved down by large recession of superior rectus and recession and anteriorization of inferior oblique.[77]

(1)c Surgery for head tilt (torsional nystagmus)

⇒ To correct head tilt / torsional nystagmus one has to operate on cyclovertical muscles.
⇒ One has to be more careful and plan the surgery thoroughly because surgery on cyclovertical muscles is more likely to cause consecutive heterotropia and therefore diplopia, particularly if it is asymmetrical and unbalanced.
⇒ The eyes are to be tilted in the direction of the head tilt. The eye on the side of he head tilt is to be extorted (excyclorotated) and that on the opposite side intorted (incyclorotated).

Figure 51-1 & 2

Diagrammatic representation of preoperative
Head tilt to right, vertical corneal axes tilted to right

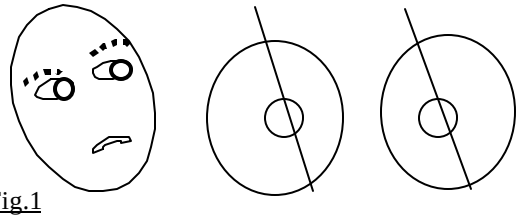

Fig.1

and postoperative vertical corneal axes:
Head straight, Vertical corneal axes tilted to right

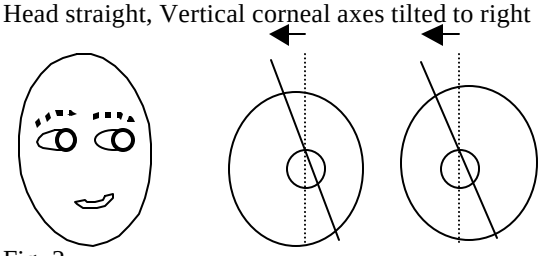

Fig. 2

⇒ The literature on management of head tilt adopted to compensate for the torsional nystagmus is quite small.
⇒ The following techniques have been reported:

(1) Conrad and Decker[80] advance or recess the appropriate oblique muscles, strengthening the extortors and weakening the intortors on the side of the head tilt. On the opposite side the intortors are strengthened and extortors weakened. This surgery was more effective if advancement was combined with resection.

(2) de Decker[81] recently advised a vertical transposition of horizontal rectus muscles. To cyclo-rotate the eyes to right (extort the right eye and intort the left eye) for a head tilt to the right the right lateral rectus and the left medial rectus are supraplaced and the right medial rectus and the left lateral rectus are infraplaced. This technique is simpler and has less chances of a consecutive heterotropia (more common with surgery on oblique muscles).

(2)A *Surgery to improve visual acuity by reducing the mobility to reduce nystagmus*

- This is achieved *by dampening the ocular motility to increase the foveation fraction / period, leading to improvement of VA.*
- There are no long-term reports available.
- All the four horizontal recti are recessed and reattached behind the equator. The amount of recession varies in different reports (table 51-4).
- *Complications* are uncommon. Surprisingly, even limitation of ocular motility is not significant. Incidence of consecutive heterotropia (e.g., exotropia) is rare.
- *Precaution*: Patients should be warned in advance to be realistic about the results. At the best, improvement in CHP, reduction of nystagmus in PP and slight (1-2 line) improvement can be expected.
- This surgery should only be carried out for marked and unsightly nystagmus.

Table 51-4, amount of surgery to reduce nystagmus:

Name of surgeon	Recession of BMR	Recession of BLR
Bietti, G.B.	To behind limbus	To behind limbus
Noorden and Sprunger[76]	10-12 mm	10-12 mm
Helveston et al[78]	11.5 mm	13 mm
Rosenbaum[79]	7.5 mm	10 mm

(2)B *Surgery to improve visual acuity by creating artificial divergence*

⇒ Pre-requisites for this plan are:
1) Presence of fusion
2) Base out prisms dampen the nystagmus

⇒ The amount of surgery is determined by finding out the power of the prisms (base out) that improve the visual acuity without producing diplopia. Medial rectus recession of 5-12 mm has been advised.[81] however; the results were not very encouraging in this series. Moreover, some patients developed intractable diplopia.

⇒ The procedure involves bilateral medial rectus recession or unilateral medial rectus recession + LR resection sufficient to produce exodeviation with intact fusion. In these cases attempt to converge the eyes results in dampening the nystagmus. When divergence is produced by surgery the effort to maintain fusion by exerting

convergence leads to reduction in nystagmus and consequently improves the visual acuity.

⇒ Some cases may get exotropia leading to non-fusible diplopia.

(2) Surgery to reduce oscillopsia

Oscillopsia usually is a problem of acquired nystagmus, which is fortunately much less common than congenital nystagmus as far as practice of strabismology is concerned. The acquired cases are mostly sent to the neurologist or the neuro-ophthalmologist to be dealt with. However, if surgery is indicated, the procedures are the same as those to reduce nystagmus.

(3) Surgery for Nystagmus Blockage syndrome
(See case report 51-3)

- There is no clear favorite among the two most often used procedures, given below.
- Unilateral MR Recession-LR Resection
- Bilateral large MR recessions (7 mm or more)
- Both have been reported to cause undercorrection / overcorrection.
- Preoperative prism-adaptation test helps in deciding the amount of surgery. First the maximum angle is measured with which there is binocular fusion for distance fixation and then it is reduced until minimum measurement is obtained with which fusion is maintained. The amount of surgery depends on this angle.

Case report 51-3
Baby aged 1 year, a case of Nystagmus blockage syndrome. See case report 51-3.

Case report 51-3:
A female infant aged 4 months came with vertical and horizontal nystagmus. We did not see her again until 3 months later when the nystagmus was found to have disappeared. It had been replaced by a large esotropia (infantile ET). She had mixed astigmatism of +3.5 D with small minus spheres. She was advised to use glasses. Occlusion was carried out for the severe amblyopia she had developed in left eye. The vision was equalized within a few weeks and LET was converted into alternating ET. Surgery was advised and bilateral medial rectus recession was carried out at the age of 11 months. She now has orthotropia, i.e., the alignment of the eyes is within 8 PD (less than 4 degrees of esotropia). There is a small left to alternating esotropia.

Complications of surgery for nystagmus

1. Main complication is a consecutive heterotropia. It is less likely after balanced operations like Kestenbaum-Anderson type procedures and more common after four

horizontal rectus muscles surgery and operations inducing artificial divergence for nystagmus blockage syndrome.
2. Undercorrections: They are quite common. A residual head turn of 15 degrees or so should be left alone. It is likely to become with time and repeat surgery may have to be performed after a few years.
3. Overcorrections: They are less common and the effect tends to wear off rapidly. One should wait for at least for 3 months before deciding that this is a case of overcorrection and needs surgery.
4. Opposite head posture: It is likely to occur but most surgeons insist that it only happens if the existence of an periodic alternating nystagmus is missed.[36]

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SPOT THE DIAGNOSIS

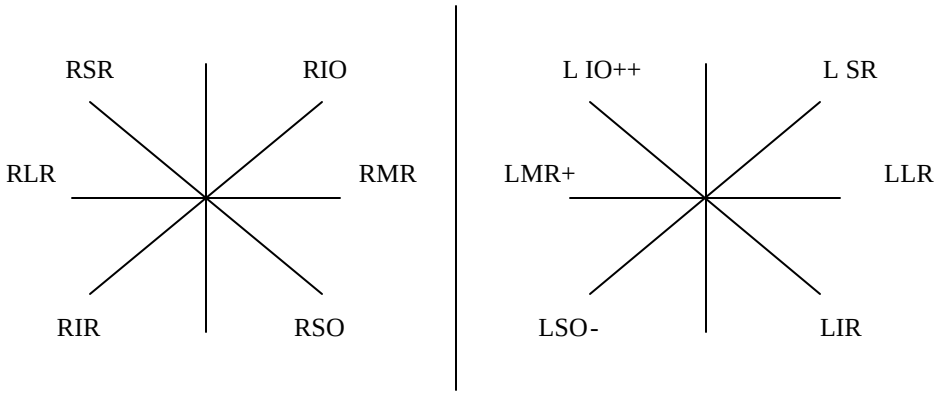
History: Girl aged 24 years complains of squint (an elevation and turning in) of her left eye since childhood.

Compensatory head posture (CHP): Head tilt and face turn to right

Cover test: LET with LHT in primary position, updeviation more marked while fixing with left eye and while looking to right.

Ocular motility:

RE LE



Please write your diagnosis, your name and JKA number below, cut on the dotted line and send by post.

Diagnosis:

Name:

JKA number:

Address:

Phone No.: FAX No.:

Mobile phone No.:

e-mail address:

RATE YOUR PERFORMANCE YOURSELF

The results of the "CME Quiz NO.4, 02 and those of "Spot the Diagnosis" No.4, 02 are given on this page.

CME (Member of the year) Quiz no.4, 2002:

The correct answers are as follows:

A. Please enumerate the advantages of various "Biometric techniques" of identification:

1. .Face recognition is non-intrusive. A photograph can be taken of the subject without his knowledge.
2. .Face recognition in particular is less expensive than other biometric techniques.
3. .Face recognition is accurate and it does not need co-operation of the subject.
4. .Retina and iris scanning are foolproof like identification by finger prints.
5. .Databases, of employees, national citizens, criminals, etc., may already exist.

B. Please circle the correct answer:

(a) Face recognition is a intrusive technique: No
(b) Manifest nystagmus is the same as Latent-Manifest Nystagmus: No
(c) In disjugate nystagmus each eye shows different movements: Yes
(d) Consecutive exotropia is more common in cases of esotropia with amblyopia: Yes
(e) History of heredity is common in cases of nystagmus: Yes

C. What are the main features of Nystagmus Blockage Syndrome?

1) Infantile esotropia (with onset in infancy) with history of nystagmus starting before esotropia comes on
2) Pseudopalsy of both lateral recti muscles
3) Nystagmus present with straight eyes and infant non-attentive. It is absent / significantly reduced with the infant attentive and esotropic
4) Manifest nystagmus when fixing eye is moved out of its adducted position and goes into abduction
5) Anomalous head-posture on occlusion of either eye so that adduction is maintained.

D. Name the main types of physiologic nystagmus:

(1) Optokinetic
(2) Caloric
(3) Rotational
(4) End-position

E. The clinical characteristics of nystagmus are:

1. .Reduced visual acuity and amblyopia
2. .Oscillopsia
3. .Compensatory head posture

SPOT THE DIAGNOSIS No.4, 2002

Correct answer: Duane's Retraction syndrome type 1.

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 28)

CME (Member of the year) Quiz no.1, 2003:

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

1. *Enumerate the cons of WAP technology*:
   (1) .
   (2) .
   (3) .
   (4) .
   (5) .

2. *Circle the alphabet preceding the correct answer:*
   (a) Maddox Rod can also measure cyclophoria: Yes / No
   (b) 1% Povidone-Iodine is better at preventing postoperative endophthalmitis than 5%: Yes / No
   (c) Retrobulbar anesthesia can cause postoperative diplopia after cataract surgery: Yes / No
   (d) A double-bellied inferior oblique muscle can cause a higher degree of cyclotropia: Yes / No
   (e) Smoking may worsen the Grave's ophthalmopathy: Yes / No

3. *Name the different types of surgical techniques for nystagmus:*
   (a) .
   (b) .
   (c) .
   (d) .
   (e) .

4. *What are the aims of nystagmus surgery? Please fill in the blanks.*
   (A) .
   (B) .
   (C) .

5. *The exact nature and amount of surgery for nystagmus depend on the following factors:*
   (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 dotted line and send by return mail)

Update questionnaire

1. I have been receiving InteRyc regularly, sent 2 monthly in 1998 (6 volumes per year) and 3 monthly (4 volumes per year since 1999): Yes / No
2. My address remains unchanged: Yes / No
3. My email address: My Web-site address:
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 Rs120 (year 2003 subscription) / DD for Rs200 or *cheque* for Rs220 (for the years 2002+2003) / DD for Rs 300 or *cheque* for Rs320 for 2001+2002+2003.
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 (97-03)
15. I would like to come for the hands on experience in the month of …… 2003.

NOTE: Please inform at least 3-4 months in advance for arrangements to be made. It is regrettable that except for two doctors, one from Bihar and the other from Calcutta, and the 17 who attended the workshop in September, 2001 nobody has come for the hand-on experience. The special tips and methods of diagnosis that I could impart because of my unique and huge experience of 46 years (since 1957 as not only an ophthalmologist/strabismologist, but as an orthoptist also) was the main reason I started this programme in which I have invested large amounts of money from my pocket. So far only two fellows have completed the course (with practical one month experience. This fact has dampened my enthusiasm for the last couple of years. Can you blame me for that?

Dear Sameer Bhai,
Yes it is the same. It has 32 pages. The name of the file is InteRycVol.1_03. I phoned Rekha today and told her about it. I shall call her again and tell har to bring papers with her to print on.
I am very thankful to you for what you are doing for me.
I have sent you Diwali egreetings. I hope you will get them. Once again a Happy Diwali to you and your family.

S.A. Patney

--- sameer shah <sameershah29@yahoo.com> wrote:
> Namaste madam,
> hope you are fine.
>
> I hav receive the Interyc
> InteRyc-volume 1, January, February and March, 2003
>
> please confim that the same one is ok as this says
> vol-1 Jan-Feb-Mar-2003, it the correct one or not ?
> reply urgently.
> thanks
>
> sameer.
>
> --- sudha awasthi-patney <sawasthi6@yahoo.com>
> wrote:
> > Dear Sameer Bhai,
> >
> > Thanks very much for printing the certificate. I
> got
> > your mail today. I am sending the InteRyc volume
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> > 03
> > today. It is very late. Please tell Rekha to send
> > all
> > of them immediately.
> > Thank you very much.
> >
> > I wish I could attend your wedding. I fit was in
> > India
> > anywhere I would definitely come but from here!
> >
> > Wishing you the best always,
> >
> > S.A. Patney
> >
> > P.S.: Please open the attachment.
> >
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> > Do you Yahoo!?
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