NEWSLETTER

OCTOBER 1987

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Editorial

Dear Friends,

Two years have flown since I took over as Editor of I.A.C. Newsletter. During this period I have given a new face-lift to the Newsletter. ' Invited articles ' were introduced and ' Spot the diagnosis ' column was included to create interest among the readers. Art paper has been used for cover and back page to give the Newsletter a better getup and same paper is utilised for good quality photograph reproduction.

Now I feel it is time for me to step down from the Editor's post and pave way for a more enthusiastic person who can further improve our Newsletter with new ideas, before its standard droops down. I thank all the office bearers and members of I.A.C. who have extended their whole hearted support to me during my short but sweet and memorable tenure as editor of I.A.C. Newsletter for the year 1986 and 1987.

Sincerely yours,
Dr. Prakash V. Patil

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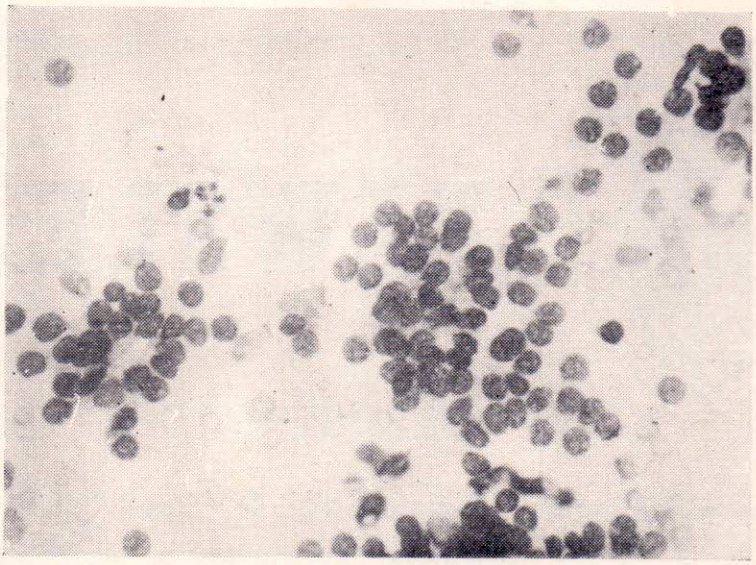
Spot the Diagnosis



Short history of case :

17 years male presented with mass in left hypochondrium (? retroperitoneal). Routine hematological and x-ray chest were unremarkable. F N. A. B. smear from mass.

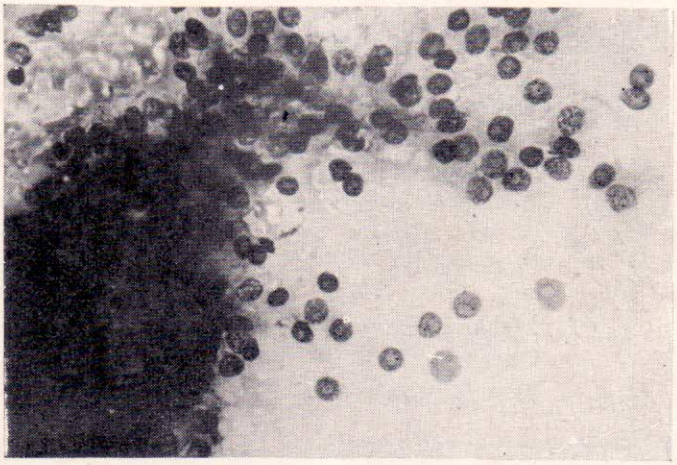
Can you spot the diagnosis ?

Send your answers to Dr. P. V. Patil, Editor, I. A. C. Newsletter, 'Shanti', 8th Cross Dr. Radhakrishnan Road, Hindwadi, Belgaum 590 011. Write on the envelope 'Spot the Diagnosis'. Answer should reach not later than 31st Dec. '87.

The first five correct entries opened on 1st Jan '88 will be announced in next issue (April 1988)

Feature is compiled by : **Dr. R. N. Visweswara,** Cytopathologist,
Kidwai Memorial Institute of Oncology, Bangalore.

Previous Case



Diagnosis : Papillary Carcinoma, thyroid

Feature was compiled by :- **Dr. Mohini Nayar**, Cytopathologist,
Dept. of Pathology, Safdarjang Hospital, New Delhi

Correct answers were received from :

Dr. (Mrs.) J. L. Camotim,
Dept. of Pathology,
Goa Medical College,
Bambolim, Goa.

Dr Agnes Jacob,
Dept. of Pathology,
Medical College,
Kottayam, Kerala.

Dr. Arvind Rajwanshi,
Dept. of Cytology &
Gynec Pathology,
P. G. I. Chandigarh.

From Organizing Secretary's Desk

XVII Annual I. A. C. Conference

Dear Friends,

The city of Bangalore in general and the 'Kidwai Memorial Institute of Oncology' in particular is indeed proud of being selected as the venue for the XVII Annual Conference of I. A. C. As most of you are already well aware through our brochure the conference is on 31st October and 1st November 1987, with a preconference workshop on ' CNS Cytology ' on 30th Oct. 1987.

The garden city of South India is gearing up to receive you as our honoured guest. We look forward to a good, fruitful exchange of scientific facts and ideas as well as development and popularisation of cytology all over the country.

As part of the scientific programme, we have the following sessions for you.

a) Guest lecture by Dr. Boris Stenquist, Chief of Cytology department from Radiumhement, Karolinska Institute for Cancer Research, Stockholm, Sweden.

b) Pre conference workshop on CNS Cytology on 30th Oct. 1987 moderated by Dr. Sarla Das, Prof. & Head, of Neuropathology, N.I.M.H.A.N.S., Bangalore. This will include 4-5 faculty participants and the entry is limited.

c) Academy Oration by Dr. Dilip Das, C.R.C., New Delhi.

d) Slide seminar by Dr. Kusum Kapila, AIIMS, New Delhi.

e) Symposium on guided FNAC - Moderated by Dr. Darshana Daftary

f) Illustrative and informative scientific sessions of paper presentations.

We at Bangalore are trying hard to make this conference a memorable experience for you. I am sure we will have an enthusiastic participation from your side without which this goal cannot be achieved.

In addition to the scientific sessions, we would like you to share the cultural heritage and scientific beauty of Karnataka, and carry sweet memories of Bangalore Conference. Karnataka Tourism Department and Karnataka State Tourism Development Corporation, will assist you in this regard.

I do hope the young participants of the competetive section will send their papers for the respective competetion (viz., Nalinibai Thakkar Prize and Smt. Jwaladevi Award) in time to avoid last-minute disappointments.

Though you are already informed, I would like to reemphasize the deadlines for your participation.

Abstract/Registration : 15th Aug. 1987
(without late fee)

Travel & Accommodation : 31st Aug. 1987

I hope you have been lured enough to book your tickets to Bangalore. On behalf of the Chairman, Dr. M. K. Bhargava and members of Organizing Committee shall I say that we are getting ready to receive you and make your stay comfortable?

With very best regards,

Dr. R. N. Visweswara
Bangalore.

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INVITED ARTICLE

COLPOSCOPY

Its Role in India

Dr. Usha B. Saraiya

Hon. Professor of Obstetrics & Gynaecology
Cama & Albless Hospital and Grant Medical College,
Bombay.

First account of Colposcopy was published in 1925 by Hinselmann. His original belief was that the earliest Cancer of Cervix must occur as a " dot " minute ulcer or a tumour which could be recognised by means of suitable magnification and illumination. He designed an instrument using sharply focussed lights and binocular magnification which he called " Colposcope " and with this, a new field of clinical investigation was started called Colposcopy.

There is little doubt that twin specialities of Colposcopy and Cytology are responsible for the reduction in mortality due to Cervical Cancer. This has been amply proved in the Western World since the 1950's, when Cancer Screening Programme started in right earnest.

In fact, the fall in incidence and in mortality is related to the intensity of screening. In places like British Colombia, Jefferson County, Finland and Australia, where Cytology Screening has been intense, the mortality is reduced by half. In U.K. there has been no change in incidence, but the mortality is reduced by 1/3. Even in country like Colombia, which has the World's highest incidence there is a downward trend in incidence as a result of screening programme.

The story in India is still different. Preventable but not prevented in the reality. Mortality is still high as cases are seen in late stages.

What needs to be done is the introduction of Colposcopy and Cytology in routine practice with the aim of downstaging the disease. The disease must be diagnosed at the stage of 0 or I and facilities must exist for the treatment of these cases. The onus for this is squarely on the Gynaecologists in India.

Although Cytology and Colposcopy are complimentary and should be used together, each is an independent discipline which has its own distinct value.

Colposcopy is practiced by the Clinicians and Gynaecologists, whereas Cytology rests in the hands of Pathologists and Technicians. Colposcope is also used freely by many Pathologists. Ralph Richart, a distinguished Pathologist uses Colposcope personally and evaluates all his cases. In India today there are only about 400 Cytologists, whereas the Gynaecologists number at least 7,000. Hence to start with, the challenge must be taken up by the Gynaecologist.

Colposcopic evaluation of the Cervix will very easily pick up the early lesions which can never be diagnosed by the naked eye. The normal looking Cervix may show punctation, mosaic or abnormal vessels which will immediately indicate the area to be biopsied. Further Schiller Iodine Test will confirm and map out the entire area which needs to be removed.

If conservative treatment is planned, a careful follow-up is possibe by Colposcopic evaluation every few months to see that the abnormal zone does not increase in size.

The best mode of treatment for conservative lesions is CO_2 Laser and that is possible through the Colposcope. Therefore, what needs to be done is as follows :—

1) Teaching and training of Gynaecologists, 15 days to 1 month of training should be quite adequate for a well qualified Gynaecologist.
2) Availability of the instruments at all Medical Colleges, Women's Hospitals and District Hospitals.
3) Organisation of Reference Centres where all abnormal cases can be referred for further evaluation.

The cost of the instrument is, at present, still high. It would help substantially, if free imports are permitted and if the duty is waived. The cost

of a good Binocular Microscope needed for Cytology and the cost of an average Colposcope are comparable at about Rs. 20,000/-.

What is the latest in the field ?

In the original equipment, introduction of fibre optic light has led to better clarity.

There has been tremendous improvement in the field of Colpo photography. Polaroid cameras are attached and instant pictures are available.

The introduction of a teaching tube made 1 to 1 teaching very easy. But currently video cameras are attached and the image viewed on a television screen placed in another room.

This is now a routide at Harvard Medical School as patients do not permit many students to view and be present at the procedure.

Availability of portable models, models which can be fixed to the wall or the examining table are all freely available commercially and have substantially popularised the technique.

Another innovation is the Cerviscope designed by Dr Adolf Stafle. This will be most suitable for our Rural Cytology Camps and needs to be given a trial.

It is a type of camera which takes colour photographs of the Cervix. The Colpo photographs can then be developed and reported upon later by the Colposcopist at his convenience. It is also possible to screen the Cytology smears & see the Cerviscope slides together in a laboratory. The cost of the equipment and the recurrent cost of the film are major deterrents.

Lastly I would like to explain some research techniques to study the angio-arcitecture of Carcinoma.

The capillary endothelium of Cervix is rich in alkaline phosphatase. Special histo-chemical technique is used to stain cervical biopsies so as to outline the alkaline phosphatase in the capillaries. These sections are then studied under stereoscopic dissecting Microscope and Micro-photography is done with eflected light.

Initially, as the cell mass increases, the intercapillary distance increases. The vessels get coiled at attempted increase in blood flow. However, due to constant increase in cell mass, the vessels get eventually compressed and the blood flow reduced. This explains why the lesion remains static for a long period a time. After a certain period, the tumour secretes efactor known as angiogenesis factor which leads to xtensive proliferation of new capillaries leading to extensive vascularisation and further growth. This phase leads to invasion and coincides with the clinical features of bleeding on touch.

This abnormal angio-architecture can be diagnosed, at the earliest, on Colposcopy as Occult Invasive Carcinoma. It took several years of research to isolate the angiogenesis factor but it has been done now and there is a lot of potential for further research lin this field. If one could chemically block the angiogenesis factor, the lesion can never become invasive.

What is the current position in the world about this disease ? The following table gives the global statistics :

Year	Total cases of Cancer Cervix	West %	East %
1975	4,60,000	21	79
2000	6.80,000	16	84

Therefore, Miller in 1975 after reviewing the screening programmes all over the world, came to the conclusion that Cancer Cervix has now become essentially a third world health problem. Further it can be solved by having organised screening programmes and that resources for this must be available.

What has been done about it in our State, i. e. State of Maharashtra?

First of all, a State Level Cancer Control Board has been formed with Sub-committees for diagnosis, treatment, public education etc.

Training programmes in Colposcopy for the Gynaecologists have been conducted by many organisations and are very popular. There are already several trained specialists available. We have trained a team of Pathologists and Gynaecologists and Technicians at the 8 Government Medical Colleges. These are supposed to form the nucleus and do further training in their own Institutes. We have also trained a Doctor and a Technician at each of the 33 District Hospitals and given them facilities to start a Pap Smear Unit.

In their first year starting from August 15 this year, they have been asked to keep a target of 1500 cases for the first year. Efforts are also being made to train District Doctors to undertake Oncology work and to set up a good reference system.

To conclude, one can say that Colposcopy has been around for quite some time, but in the last few years, it has been established on a firm footing. The formation of Cancer Control Boards at Central and State Level has given this problem the necessary boost. What remains to be done now is to co-ordinate the activities of Gynaecologists, Pathologists, Technicians etc as also concentrate on creating public awareness. For these the motivation must come from the Gynaecologists. I feel confident that the younger generation of Doctors will take up this challenge.

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Cytology Activities

A workshop on ' Early detection of Cervical Cancer by Colposcopy and Cytology ' was held from 23rd to 25th April 1987 in Safdarjang Hospital, New Delhi, organised by the departments of Obstetrics and Gynaecology, Cytopathology along with the Institute of Pathology (I C. M. R.). The 3 days workshop included a series of lectures and practical demonstrations emphasising the role of colposcopy and cytology in early detection of cervical cancer which is one of the commonest cancer in the country. The faculty members included Dr. Usha Saraiya, Dr. Maya Lulla and Dr. Darshana Daftary of Cama and Albless Hospital, Bombay; Dr. S. Mittal from Lady Hardinge Medical College, New Delhi; Dr. V. L. Bhargava of A.I.I.M.S., New Delhi, Dr. P. Chaddha of Maulana Azad Medical College, New Delhi, besides the members of the host institutions.

Dr. Vaidehi Kanan from Philadelphia, U. S. A. successfully conducted a workshop on ' Breast & Prostate gland cytology ' on 1st August 1937, at Seth G S. Medical College, Bombay.

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Abstracts from Symposium on "Colposcopy"
XVI Annual Conference of IAC, JIPMER, Pondicherry

30th OCT. 1986

Moderator : **Dr. Usha Saraiya**

1. 'Basic Colposcopy'

by

Dr. Jyoti Taskar

Research Officer, Cytology Clinic,
Cama & Albless Hospital, Bombay

A better appreciation of cervical lesions has been achieved by using colposcopy.

The Colposcope basically consists of an optical system which gives the necessary stereoscopic perception, and illuminating system, stand and accessories such as a camera or laser attachement, as required.

The colposcopy tray consists of instruments for exposure and visualisation of the cervix-a volsellum, speculum, sponge holding forceps, biopsy forceps, cotton swabs, bowls for normal saline, acetic acid and schiller's iodine.

Prior to the colposcopic examination, cytology smears are collected. The cervix is visualised after applying normal saline and then 3% acetic acid. Schiller's iodine test is used to confirm or elucidate other colposcopic test results.

The checklist for negative colposcopy includes no acetowhite area, no abnormal vasculature, no mosaic or punctation, no schiller positive area. A colposcopically directed biopsy should be taken if required. The whole procedure should not take more than fifteen minutes so as to avoid discomfort to the patient.

2. 'Colposcopy of Viral Lesions'

by

Dr. Maya Lulla,
Visting Colposcopist,
Cama & Albless Hospital
&
Sir. H. N. Hospital, Bombay.

"Genital Warts' is an old disease, described by ancient physicians as "Condylomas or Figs." In 1954 sexual transmission of genital warts was affirmed. Human papilloma virus, (HPV), infection is multicentric in origin i. e. it involves vagina vulva, cervix and uterus. One must keep in mind he possibility of HPV infection co-existing with tDysplasia or CIN. Preliminary observations show that condylomas progress to CIN.

Review of the literature shows that there has been an increase in the incidence of HPV infection. It is difficult to say whether there is actual increase in incidence due to change in life style of the individuals or the cytopathology of HPV infection has become more clearly defined. There are three morphologic entities of HPV infection-Papillary, Flat, & Inverted. It is easy to diagnose papillary variety of HPV infection with the naked eye but difficulty arises in diagnosis of flat and inverted variety. Flat condylomas represent the earliest lesion in the process of malignant conversion initiated by papilloma virus. Hence it is very important to pick up flat condylomas and it is here that colposcopy and histology of target biopsies carried out under colposcopic control can be of great help.

This communication from Colposcopy clinic of Sir. H. N. Hospital analyses the Cytologic, Colposcopic and Histologic pattern in cases of HPV Infection.

3. ' Angio Architecture and Vascular basis for Colposcopy '

by

Dr. S. K. Das,
Department of Obstetrics & Gynaecology, Safdarjang Hospital, New Delhi.

The introduction of colposcopy has made a major break through in the early diagnosis of carcinoma cervix. With the advancements in the visualization techniques, vascular pattern (angioarchitecture) of cervix in-vivo further contributes to the earlier diagnosis of malignancy.

Normal cervical epithelium shows vascular pattern of network type, hairpin type or combined. In the metaplastic epithelium there are branched and dilated vessels. Inflammatory lesions are associated with increased vascularity. Diffuse punctations with strawberry appearance and bifurcated vessels are most diagnostic of trichomonas infection. Diagnosis of cervical intra-epithelial neoplasia and frank carcinoma is clinched by the appearance of atypical blood vessels.

4. ' Correlation of Cytology, Colposcopy and Histology '

by

Dr. M. Chandra

Asst. Director,
Institute of Pathology (ICMR), New Delhi.

Recent use of cytology and colposcopy in the gynaecological practice has lead to early diagnosis of cervical cancer. These two techniques are being increasingly used for diagnosis of cervical lesions. Both colposcopy and cytology reflect the histological changes in the tissue. Non-neoplastic lesions are characterised by the presence of acetowhite epithelium on Colposcopy, presence of metaplastic or immature cells in the smears and metaplasia of the covering epithelium, with increased number of cell layers in the tissue sections. Malignancy is revealed by the presence of malignant cells in the smears, presence of thick irregular acetowhite epithelium, atypical vasculature on examination and histological changes like loss of orientation, loss of polarity, increased nuclear cytoplasmic ratio and mitotic activity with invasion of connective tissue.

5. ' Colposcopically directed procedures— CO_2 laser therapy '

by

Dr. Navratan Bafna

Prof. of Obst. & Gynaecology,
S. M. S. Medical College, Jaipur.

Carbon-di-oxide laser is a new modality of treatment, Under colposcopic direction it has the ability to destroy or excise both extremely small and extremely large area of tissue to any depth precisely. It can almost always be used as an out-patient procedure with minimal or no discomfort. The patients with CIN, VIN, VAIN, Genito Urethral and anal condylomas can be treated safely by destruction or excision under local anaesthesia in 99% of the cases. 1% may require general anaesthesia. Vulval lasers do need general anaesthesia and thus admission. Healing occurs without fibrosis, fever or no complications. Pain perception during the procedures is practically nil.

Success of the treatment depends on —

— Careful patient selection by an expert colposcopist.

— Destruction to a depth of 5-7mm in the cervix. 3-4mm in vagina, vulva and anus. For vulval dystropies—skinning vulvectomy is done.

— Adequate cytologic and colposcopic follow up. Cure rate on an average is more than 90%. It varies from 87—96%.

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INDIAN SOCIETY OF ONCOLOGY

III BIENNIAL CONFERENCE
&
INDO-USSR INTERNATIONAL
WORKSHOP ON OESOPHAGEAL CANCER
8—12 FEBRUARY 1988

The III Biennial Conference of the Indian Society of Oncology is being hosted by the Kidwai Memorial Institute of Oncology in Bangalore on 10, 11 & 12 February 1988. Also an INDO-USSR International Workshop on Oesophageal Cancer is being conducted on 8 & 9 February 1988.

For Details contact :

Dr. N. ANANTHA,
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III Biennial Conference of ISO,
Kidwai Memorial Institute of Oncology,
BANGALORE—560 029 **INDIA.**

Phone : **642061**

GREAT WORDS

It is better to be nobly remembered than nobly born.
– *Ruskin*

Wicked men obey from fear, good men from love.
– *Aristotle*

No greater grief than to remember days of gladness when sorrow is at hand.
– *Friedrich Schiller*

The world is a comedy to those that think, a tragedy to those that feel.
– *Horace Walpole*