



NEWSLETTER

APRIL - 1989

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HIGHLIGHTS OF XVIII ANNUAL CONFERENCE OF I. A. C. - AHMEDABAD

Dr. Darshana Daftary

The Conference really took off with a bang from the very start. The pre-conference workshop on viral infections of Female Genital tract was conducted by Dr. Maya Lulla with participations of Dr. S. K. Das, Dr. Chowdhary, Dr. Bobhate and Dr. Lalita Joshi. It was truly made interesting by a panel discussion, in which not only the guest speaker Dr. Tilde Kline but also the President of Cervical Pathology and Colposcopy Society of Israel, Dr. J. Faktoor participated. A special video film on laser therapy was also shown

by him.

The inauguration of Conference was very appropriately done by Dr. K. K. Shah, the President of South Asia Medical Association and Chairman, All India Family Welfare Committee whose few but inspiring words set the academic mood of the Conference. The melodious recitation of sanskrit shlokas by Dr. Darshana Jhala and a very short but apt commentary by the compere gave a fitting start to what was to be one of the most well attended and well

managed conferences. Dr. Mohini Nayar in her oration recapitulated the history and put into proper perspective the role of Cytology. Dr. Tilde Kline, our guest speaker from Philadelphia, USA, gave an inspiring talk on FNAC of Head & Neck region, combined with that of Prostate Gland. The Nalinibhai Thakhar prize was won by Dr. Awtar Kaur of Delhi, the Jwala Devi Prize by Ms. Beranadette Carvalho of Bombay and the newly introduced Dr. Satya Monga Prize on Immuno-cytochemistry by Dr. Rajiv Dhar of Delhi.

The dinner at 'Vishala' after the general body meeting was truly a dream come true. The ethnic setting with sword dancing, suddenly brought rural India back into our hearts.

The symposium on 'Problems in Cyto diagnosis of Fluids' was moderated by Dr. Harilal, ably aided by Dr. Shameen Sharif, Dr. Shreedevi Amma, Dr. P. K. Agrawal and Dr. Prakash Patil.

The slide seminar presented by Dr. Darshana Daftary was very well received and aptly reflected the hard work put in. A special session on Head and Neck Cytology was addressed by Dr. Flood, a visiting Head & Neck Onco-surgeon from Glasgow.

More than 50 papers were presented by various delegates covering almost all sites and aspects of Cytology.

Dr. H. S. Shah and his team of

workers had worked unstintingly to organise this conference and the excellent arrangements spoke for themselves. Rarely have the gastronomic delights of a conference been as well matched by the academic feast.

And as we said goodbye to Ahmedabad, we realised that this had been a rare experience which would be hard to forget and which we would cherish in our memories for a long time to come.

I.C.M.R. Training Programmes 1988-89

At the Institute of Cytology and Preventive Oncology, New Delhi, the following were organised.

1. Workshop on Colposcopy for Management of Precancerous and Early Cancerous Lesions of Uterine Cervix (March 88)
2. Workshop on Human Papillomavirus and Cervical Carcinogenesis (Dec. 88)
3. Workshop on Guided Fine Needle Aspiration Cytology using Imaging Techniques for Intraabdominal, Intra-thoracic, Breast and Thyroid Lesions. (January 89)
4. Workshop on Molecular Biology of Human Papillomavirus and cervical cancer (February 89)
5. Indo-US workshop on Chemoprevention of the Uterine Cervical Dysplasia with Nutrient Intervention (Dec. 89)

ANNOUNCEMENT

Indian Academy of Cytologists is happy to announce fellowship for training in Cytology to Pathologists-with M. D. (Path) degree only. Kindly write for further details to Dr. Darshana Daftary, Secretary, IAC, Cytology Clinic, AMWI, Cama and Albless Hospital, Bombay-400 001. Last date of application 15.5.1989.

Article :

The Utility of Immunocytochemistry in Tumour Diagnosis

Dr. S. K. Bobhate,

Dr. Mrs Shobha Grover

Introduction :

One of the major aims in cancer research is to find new methods that will improve the accuracy and sensitivity of diagnosis at its earliest stage and will also monitor treatment and follow up. The conventional histochemical staining procedures are inadequate to depict the biochemical markers in malignant cells. Since the isolation of various tumour markers in human cancers like CEA, AFP, ectopic hormones and the identification of various infectious viral agents, considerable efforts have been spent in localizing these markers directly on the suspected malignant cells. Unfortunately, these initial leads have not been fully realized in cases of human malignancies. The advent of monoclonal antibodies has provided a boon in the diagnosis of tumours.

Most specialised cells in a section of tissue contain preponderance of one particular macromolecular substance. This substance or cell component is not detectable in a routine laboratory. These cell components act as antigens in the tissues. To demonstrate or to visualise these antigens in the tissues a specialised, specific and sensitive immunocytochemical technique has been described.

The objective of immunocytochemistry is to identify the tissue constituents in situ by means of a specific antigen and antibody reaction tagged by a visual marker. The visual marker can be a fluorescent label i. e. fluorescein and rhodamine or an enzyme label i. e. Alkaline phosphatase or horse raddish peroxidase. The enzyme of choice is horse raddish peroxidase (HRP)

Principles of Immunocytochemical Techniques.

The principle of immunocytochemical technique is to visualise the previously undetectable cell components by using specifically labelled antibodies.

Principles of Immunoperoxidase :

In this technique, the fluorescein dye is replaced by an enzyme i. e. peroxidase to label the antibody

The antigen antibody complex is visualised by histochemical reaction (Peroxidase-diamino-benzidine reaction) under light microscope.

The methods are :

1. Direct
2. Indirect
3. The peroxidase Anti-peroxidase (PAP) method.
4. Avidin-Biotin method.

Report of the Standing Committee for Accreditation and Examination of Indian Academy of Cytologists (1988-89)

The Indian Academy of Cytology in 1975 appointed a Standing Committee for accreditation and examination under the chairpersonship of Prof. (Mrs.) Usha K. Luthra.

The objective of this committee was—

- 1) Accreditation of Cytology laboratories.
- 2) Organising examinations for cytotechnicians and Cytotechnologists.
- 3) The third objective has been approved in 1987 which is to assist in human resource development through training, seminars, workshops and possibly through the school of Cytology.

1) ACCREDITATION OF CYTOLOGY LABORATORIES / INSTITUTES / CENTERS FOR DIAGNOSTIC CYTOLOGY SERVICE.

The Cytology laboratories will be accredited in three categories.

- a) Comprehensive b) Gynae only c) Non Gynae.

The number of laboratories accredited in category (a) will be at least 50% of the total accredited laboratories and in category (b) & (c) not exceeding 25% each.

To date twenty laboratories have been accredited for diagnostic cytology services under various categories and three laboratories have been recommended for accreditation.

2) ACCREDITATION OF CYTOLOGY LABORATORIES/ INSTITUTES/CENTERS FOR TRAINING AND EXAMINATION OF CYTOTECHNICIANS AND CYTOTECHNOLOGISTS.

For this purpose there are seven laboratories which are accredited in India i. e. at New Delhi, Chandigarh, Nagpur, Bombay, Trivandrum and Bangalore. The accredi-

ted laboratories are expected to—

- i) impart training to cytotechnicians/cytotechnologists under the fellowship programme of I. C. M. R. or any other programme.
- ii) to conduct workshops / seminars to disseminate knowledge/message of cytology in and around their areas.
- iii) to organize group education activities (GEA) in the region by collaborating with other centres in that area.

3) HUMAN RESOURCES DEVELOPMENT

1. Cytotechnicians' Examinations : The national examination for Cytotechnicians are usually held in January. Thirteen candidates appeared and ten were declared successful this year.

2. Cytotechnologists' examination : The second national cytotechnologists examination was held in January 1989 and five candidates qualified in this examination.

3. ICMR Fellowship in Cytology : In order to provide special and/or advanced training in laboratory technology used in the field of cytology to cytotechnologists / cytotechnicians already employed in the institutes / centres on permanent job, the council continued to impart training during the year 1988-89.

The Indian Academy of Cytologists is extremely grateful to ICMR for instituting this very timely programme for Fellowships in Cytology, because of which it has been possible to train a band of workers in this specialized field of biomedicine. At the same time, it is felt that the amount of fellowship needs to be enhanced keeping in view the increase in cost of living. The matter is under consideration by the I. C. M. R.

Report of the Section on Cervical Pathology & Colposcopy of the Indian Academy of Cytologists.

Dr. Usha Saraiya

The following programmes were organised.

1. Workshop on Early Detection of Cervical Cancer by Cytology and Colposcopy was organised by Dr. S. K. Das and Dr. Mohini Nayyar in Delhi in Aug. 88. It was inaugurated by Dr. U. K. Luthra, Dr. Usha Saraiya and Dr. Maya Lulla participated.
2. Workshop was conducted at Surat Medical College in April 1988 conducted by Dr. Usha Saraiya and Dr. Darshana Daftary.
3. Up date on Cervical Cancer was held at Nagpur Medical College on 15th September 88 by Dr. Shobha Grover. Dr. Usha Saraiya, gave a guest lecture and Dr. Maya Lulla spoke on HPV infection.

4. A symposium on Cytology and Colposcopy was held at the joint conference of Obstetric and Gynaecological Societies in Maharashtra at Nasik in October 1988. Dr. S. K. Das and Jyoti Taskar participated.

5. A workshop on Early Detection of Cervical Cancer by Cytology Colposcopy was held in Hyderabad on 30th and 31st January 1989 by Dr. Shyamala Bhaskaran. Dr. D. B. Reddy, Dr. Shobha Grover, Dr. Usha Saraiya and Dr. Vanaja Sankaran participated.

6. Tata Memorial Centre invited the renowned Colposcopist from Paris Dr. Rene Cartier to give a week long workshop from 27.2.89 to 4.3.89.

A personal communication was received from Dr. Wespi of Zurich. He had sent reprints of his recent publication on significance of aceto white areas in colposcopy of HPV lesions for comments. The article indicates that a lot of new concepts are still coming into this field,

The account in the name of 'CPC-IAC' with Union Bank in Bombay has been closed. The balance together with interest has been sent to the Treasurer, IAC in Delhi. Members are now requested to send the annual dues of Rs. 50/- directly to the Treasurer, IAC. The membership list and the details regarding arrears is now with Dr. Kapila.

The next IFCPC World Congress will be held in Rome in 1990. It is hoped that many members from India will participate. We have received a new directory from them. They have also announced that 1993 World Congress will be held in Chicago, USA. We continue to receive copies of 'The Colposcopist' which are mailed to all our members.

The utility of immunocytochem ... contd from page-2

These immunocytochemical procedures allow visualization of cell components in a variety of specimens like smears, cell suspensions, imprints, tissue culture preparations, cryostat sections and paraffin sections,

Peroxidase antiperoxidase (PAP) techniques have proved to be more sensitive and specific and the sensitivity is said to be 1 : 1000

The immunoperoxidase technique has following advantages :

1. It can be used on the paraffin sections.
2. The preparation is permanent.
3. Retrospective study is possible and
4. The simple light microscope is sufficient for the visualization of antigen antibody deposit.

For immunofluorescent study.

1. Fluorescent microscope is essential.
2. Fresh tissue is required most of the time and the preparation is not permanent.

This section is still small and a lot of work needs to be done to consolidate its position. Our aim continues to be to introduce colposcopy in routine gynaecological examination and thereby help in early detection. As we near the 'Zero' hour of Health for All by the year 2000, it is the wish of all of us that PAP smear will become a reality for Indian women in the 21st Century,

Towards this goal, I had a meeting with the Honorable Minister of State for Health, our dynamic Miss Saroj Khaparde. She is most sympathetic and thoroughly convinced of the need, and will give full support. I take great pleasure in congratulating one of our members Dr. S. K. Das on her appointment as Chairperson of Oncology Subcommittee of the Federation of Obstetric and Gynaecological Societies of India. I have served on this committee for the last 15 years and feel that it is the key organisation to promote Colposcopy. It is our opportunity to reach 8000 odd gynaecologists in India. Let us wish her good luck in this endeavour.

I request all the members of IAC to take an interest in this subject and participate in all its activities.

Applications of Immunocytochemical Techniques.

It is helpful in the :

- A. Classification and/or differentiation of tumours.
- B. Assessment of functional activity.
- C. Additional morphological information.
- D. Identification and localization of viral antigens.
- E. Renal and skin diseases.

Though there is no doubt that the immunocytochemical techniques provide an important area of pathology where differential diagnosis between various lesions depends on immunological techniques, interpretation of the immunofluorescent and immunoperoxidase stains should be made with utmost care as these techniques are known for high sensitivity and nonspecific staining. Proper negative and positive controls should always be included while examining any batch of slides.

BOOK-REVIEW

'DIAGNOSTIC CYTOPATHOLOGY-A TEXT AND COLOUR ATLAS'

by Chandra Grubb
Churchill Livingstone
Edinburgh, London, Melbourne, New York,
1988, pg. 214
Price £ 29.5

This long awaited and much needed concise colour atlas of cytopathology has been released. The book has 14 chapters with an introduction to 'Malignant cell' which is most welcome. Introduction to each chapter with a bit of sampling techniques is an useful hint for

processing of the material. The author has dealt with topics on 'Female Reproductive System' and 'Serous Effusions' elaborately,

The high quality art paper gives a very good get up for the coloured microphotographs. This text cum atlas serves as a ready reckoner for pathologists engaged in cytology practice.

Dr. P. V. Patil
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