



NEWSLETTER

APRIL 1988

Office Bearers

President
Dr. Kusum Verma
Secretary
Dr. Darshana Daftary
Treasurer
Dr. Kusum Kapila
Members
Dr. Maya Lulla
Dr. Manju Lata Saraf
Dr. Vanaja Shankaran
Dr. S. K. Das
Dr. R. N. Visweswara
Dr. Arvind Rajwanshi
Chairperson of A & E Committee
Dr. Usha Luthra
Chairperson of CPC
Dr. Usha Saraiya
Editor of Journal of Cytology
Dr. Jayashree R. Chowdhury
Editor of I. A. C. Newsletter
Dr. Prakash V. Patil
Immediate Past President
Dr. M. Krishna Bhargava
Emeritus President
Dr. P. N. Wahi

Contents

	Page No.
1. Editorial -Dr. P.V. Patil	1
2. Highlights of XVII Annual Conference of I. A. C. - Dr. Darshana Daftary	1
3. Jwaladevi Award Winner	2
4. Spot the Diagnosis	2
5. Invited Article - 'Aspiration Cytology of the Breast' - Dr. Mohini Nayyar	3
6. Letter to the Editor : Exit, The Pap Smear - Dr. Usha B. Saraiya	4

Editorial

Dear Friends,

How I wish I was relieved from the editors post after I released the last issue. Due to your encouragement especially of Dr. Usha Luthra I could not say 'no', to edit the IAC Newsletter for one more year.

In this issue, the volume of the Newsletter is reduced to make you feel that the text is less. In reality it is not so. Thanks to the Photo typesetting for giving this pseudo effect.

Well, Dr. Usha Saraiya's letter is really thought provoking. She means what she says. Probably, the fact that papers on Gynec Cytology are scanty does not mean that work in this sphere is neglected. I feel we have to give a serious thought and see that Pap smear doesn't make an exit now, when we need it most.

Yours sincerely,

DR. PRAKASH PATIL.

HIGHLIGHTS OF XVII ANNUAL CONFERENCE OF I. A. C.

Dr. Darshana Daftary, Secretary, I. A. C.

As we streamed into Bangalore, full of anticipation of meeting all our colleagues once again and to exchange information of the activities done over the past one year, the delightful weather and blooming flowers welcomed us into the city.

The pre-conference workshop on CNS Cytology was conducted with painstaking efforts by Dr. Sarla Das and her colleagues at NIMHAS and other centres in India. The quality of material and presentation left little doubt for the success of the workshop, which was well attended as expected.

The conference began with an inauguration in style. The Minister of Health, Shri. B. Rachaiya came despite his obvious

ill-health. Luminaries like the Mayor, Director of Medical Education and Research as well as Director of Education also made it a point to attend, making the function a great success.

The oration by Dr. Dilip Das showed clearly the tremendous efforts put in by Dr. Das over so many years of practice of Cytology.

Our Guest speaker, Dr. Bjorn Stenkvist, Head of Cytology Division, at the famous Karolinska Institute of Stockholm, Sweden, delivered an informative and enthralling lecture on 'Imaging Technology in Clinical Cytology'. Though we are way behind these developments, and it may take years

before this modality filters down to us, the sheer possibility of knowing what lay ahead was so absorbing that I am sure most of us slept that night dreaming of a computer image.

Papers for the Nalinibai Thakar Prize and Jwaladevi Award were of high standard. Dr. Raja Shekhar's paper on "Role of Immunohistochemical staining for cytokeratin and leukocyte common antigen in FNA from poorly differentiated malignant tumour" and Mrs Kalavathi's paper on "Parasites and Fungus in Cytodiagnosis" won the Nalinibai Thakar and Jwaladevi Awards respectively.

The Conference dinner held on the luxurious premises of Taj Palace Hotel with

Edited & Published Bi - Yearly for : Indian Academy of Cytologists,

by : Dr. Prakash V. Patil, 'Shanti', 8th Cross,

Dr. Radhakrishnan Road, Hindwadi, BELGAUM - 590 011.

Printed at : Yarbhal Offset, Belgaum - 590 008. Phones : 27952, 25545

dances not only of South India but of all parts of the country, truly representing National integration, was an event to remember.

Dr. Kusum Kapila's slide seminar was breath-taking not only in the quality of slides but also for the excellence in material

and presentation. It will be a long time before we may have such an academic feast of this standard and quality. The session of proffered papers where a total of 26 papers were presented, covered almost all systems of body with many interesting and well presented data.

As we bid farewell to Bangalore, with Dr. Bhargava, Dr. Hazarika and their team's warm hospitality in our hearts, Dr. & Dr. (Mrs.) Stenkvist's gentle and pleasant presence with us and the treasures of Cytology in our minds, it was with tinge of regret that one feels, when good things come to an end.

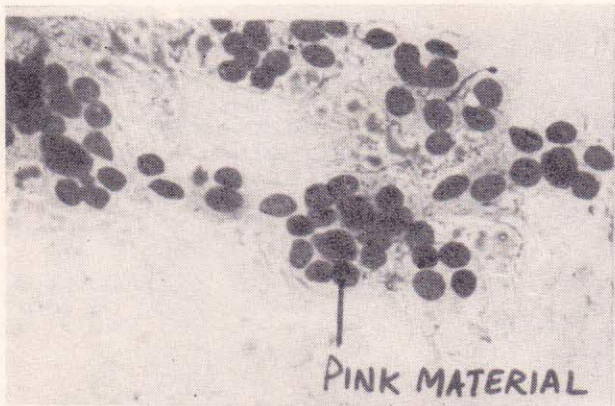


Mrs. Kalavathi Ravi

'JWALADEVI AWARD' WINNER, 1987

- Obtained Diploma in laboratory Technology in 1982 from J. N. Medical College, Belgaum.
- Passed Cytotechnician Exam conducted by I. A. C. in first class in 1984.
- Working in Kidwai Memorial Institute of Oncology, Bangalore, as Cytotechnician from 1983.
- Awarded 'Jwaladevi Award' for best paper presentation on 'Parasites and Fungus in Cytodiagnosis'.

SPOT THE DIAGNOSIS



Short History of case :

38 years female c/o. Right Parotid swelling with pain.
F. N. A. B. smear from parotid region.

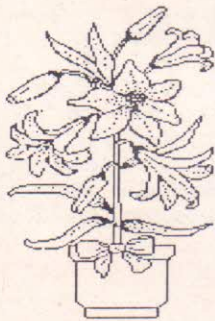
Can you spot the diagnosis ?

Send your answer to Dr. P. V. Patil, Editor, I. A. C. Newsletter, 'Shanti', 8th Cross, Dr. Radhakrishnan Road, Hindwadi, Belgaum - 590 011. Write on envelope 'Spot the Diagnosis'. Answers should reach not later than 30th June 1988.

The first five correct entries opened on 1st July 1988 will be announced in the next issue (October 1988).

Feature is compiled by :

Dr. Arvind Rajwansi,
Asst. Prof.,
Dept. of Cytology & Gynec. Pathology,
P. G. I., CHANDIGARH - 160 012.



Previous Case Diagnosis :

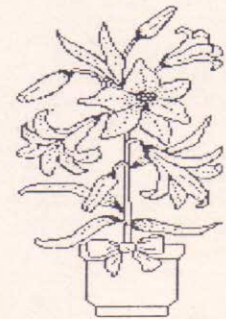
Adenocarcinoma, Renal (Small cell variant)

Feature was compiled by :-

Dr. R. N. Visweswara,
Cytopathologist,
Kidwai Memorial Institute of Oncology,
Hosur Road, BANGALORE.

Correct answer received from :-

Lt.Col. S. C. Sharma,
Central Command,
LUCKNOW.



ASPIRATION CYTOLOGY OF THE BREAST

Dr. Mohini Nayar,
Cytopathologist,
Safdarjang Hospital,
NEW DELHI.

Introduction :

Breast cancer is the most frequent malignant tumour in women when considered on a world wide basis. Higher rates of breast cancers have been found in U.S.A. (87.5 % to 87.7%) Lower rates have been found in Asian and African countries. In Asia, incidence is as low as 22.7% to 12.7% in Japan and 23.3% to 21.2% in India¹. Effective screening and early detection are of paramount importance as breast cancer is likely to become an even more serious health problem in the future. Although mammography is the only procedure currently considered for application, there is a need for continuing investigation in the development of non-invasive detecting modalities including ultrasound and thermography and now Fine Needle Aspiration Cytology (FNAC)².

Aspiration of cellular material for diagnostic purposes is a well established procedure in use since 1912.³ Recommended in 1952 by Saphir⁴, FNAC of the breast has been increasingly used by several European clinicians. Since then this technique has been extensively used by Söderstöm in Lund⁵ and by Franzen and Zajicek⁶ in Stockholm. In England reports of FANC have been published by Gibson and Smith⁷, 7 Tribe⁸ and later by Webb⁹ and Furnival¹⁰ and his associates. Simplicity, rapid diagnosis, little inconvenience for physicians and minimal discomfort for the patients are illustrated as major advantages of this procedure. In view of the overcrowded clinics, the rapidity of the procedure is another advantage to be considered for developing countries. In India use of this procedure was initiated as early as 1972. The number of institutions adopting this technique for diagnostic work has been steadily increasing since 1980. The main reason for the widespread present use of this technique is the diagnosis for or against a neoplasm before the treatment of the lesion is considered. Although cytologic methods will never eliminate the need for histologic diagnosis, FNAC has a definite place in the management of neoplastic or non-neoplastic disorders. The work of aspiration cytology should preferably be performed by the cytopathologist.

Various methods of diagnosis of breast cancer are - physical examination, mammography, thermography, ultrasound and aspiration cytology with the diagnostic accuracy rate of 57.83 % , 61.81 % , 52%, 67% and 92.97 % respectively. Preoperative diagnosis of breast cancer can be made by Aspiration cytology, Tru-cut biopsy and Drill biopsy. FNAC has the highest percentage of accuracy of 92.97 % as compared to diagnostic accuracy of 67 % and 85 % respectively with Tru-cut and Drill biopsies.

Observations :

During the cytological examination the cellular components looked for are duct cells, acinar cells, naked bipolar nuclei, apocrine cells, foam cells, fat cells, fibrocytes, giant cells, malignant cells, polymorphs and connective tissue.¹¹

Smears from cases of mastitis show sheets of polymorphs with a few histiocytes. In chronic inflammatory diseases of the breast, besides the presence of chronic inflammatory cells, foreign body giant cells are also occasionally seen. In our experience tuberculosis of the breast is more prevalent in our country compared to the western world. Tuberculosis of the breast is diagnosed on aspiration cytology by the presence of polymorphs, histiocytes, epithelioid and Langhan's giant cells with or without evidence of necrosis. Attempt should be made to demonstrate Acid Fast Bacilli on smears. This entity is rare in western countries with a reported incidence of 0.6 to 1.6% of all mammary lesions. However, we have diagnosed tuberculosis in 3.4% of cases.¹² After the first report of breast tuberculosis from this country by Chaudhury et al,¹³ reported incidence has varied from 2.5 to 5.38%.

On aspirating a breast lump one may aspirate the cyst fluid which on cytological examination shows foam cells and or degenerated epithelial cells with presence of apocrine cells. As far as the aspirate smear from solid breast lump is concerned, it is important to distinguish the benign from malignant lesions. Demonstration of myoepithelial cells is important to be definite about the benign nature of the tumour. In duct papillomas, clumps of cells with large nuclei and some degree of nuclear variation are seen. However, chromatin of these nuclei is finely reticulated and is neither stippled nor coarse. In fibroadenomas both epithelial and connective tissue components are aspirated. The glandular part of these aspirates may look fairly disturbing, specially in lesions associated with pregnancy or lactation. Fibroadenomas may also rarely show foreign body like giant cells which are infact derived from the connective tissue.¹⁴

In malignant tumours of the breast, besides the usual criteria of malignancy the smears are cellular compared to aspirates from benign lesions and it may be possible to discern necrosis of individual cells. On cytological examination of malignant breast tumours, it is possible to categorise medullary, papillary, colloid, lobular and apocrine carcinomas besides lymphomas and mesenchymal tumours of the breast in addition to Paget's disease. In papillary carcinoma there is fibrous core with layers of epithelial cells which are malignant. Colloid carcinomas show islands of epithelial cells lying in pools of mucin. Medullary carcinomas show infiltration of the tumour cells by lymphocytes, Apocrine carcinomas though rare show malignant cells with large amount of eosinophilic granular cytoplasm. Lobular carcinomas are characterised by tightly packed clusters of small cells with minimal atypia and hyperchromatism. However, absence of naked bipolar nuclei, presence of indented and lobulated nuclei and magenta bodies help to distinguish benign from malignant cells. One should also keep in mind the possibility of metastasis to the breast when interpreting cytological smears.

Discussion :

In our experience at the Safdarjang Hospital, there is no need for excisional biopsies if clinical and cytological examination prove to be negative. However, in view of the false negative results we have been following routine checking, and all palpable lesions at short intervals after the negative workup. Excisional biopsy is done if the lesion grows or changes in consistency. Breast aspiration cytology in our experience has a definite place in the diagnosis, management and follow up of patients with breast lumps. It is particularly useful for a developing country like ours where the patient load is always heavy. In addition, besides cutting down on the cost, it is painless and allays anxiety in apprehensive patients. In our hospital F. N. A. C. was started in 1980. There has been increasing demand for pre-operative diagnosis of breast lumps by this technique. The number of aspirations done on breast lumps was 40 in 1980 while the same has risen to 663 in 1987. A total of 3,239 breast lumps have been aspirated so far. By use of this technique, frozen sections or pre-operative biopsies for diagnosis are done rarely and only on a request from the cytopathologist. Material for tumour markers and electron microscopic studies if required in problematic cases can also be made available by a repeat aspiration or by keeping few unstained slides initially. Aspiration cytology of breast lesion can also play a role in screening programmes for breast cancer in addition to self examination and mammography.

References :

1. Proceedings of the second UICC Conference on cancer prevention by Ministry of Public Health Kuwait. Breast Cancer: Epidemiology and risk factors by A. S. Donn and C. S. Muir p 155-169.
2. Barth Hoogstraten: Breast Cancer screening. CRC series on experiences in Clinical Oncology. CRC Press 53-85.
3. Ward GR. Bedside Haematology, W. B. Saunders, 1912.
4. Saphir O. Early diagnosis of breast lesions, JAMA. 150-159, 1952
5. Söderström, N. : Fine needle aspiration biopsy stockholm. Almqvist and Wiksell, 1966.
6. Fransen, S., and Zajicek J. : Aspiration biopsy in diagnosis of palpable lesions of the breast, Acta Radiol. 7 : 241, , 1968.
7. Gibson, A. and Smith G. : Aspiration biopsy of breast tumours. Br. J. Surg. 45 : 236, 1957.
8. Tribe C.R. : Cytological diagnosis of breast tumours by the imprint method. J. Clin. Pathol. 18: 31, 1965
9. Webb J. The diagnostic cytology of breast carcinoma. Br. J. Surg., 57 : 259, 1970
10. Furnival C.M., Hughes, H.E. , Hocking, M.A. Reid, M.M.W., and Blumgart, L.H. : Aspiration cytology in breast cancer, its relevance to diagnosis. Lancet 2, 446, 1975.
11. Hubert Schöndorf : Aspiration cytology of the breast. Saunders 16 - 41.
12. Tuberculosis of the breast - A cytomorphological study. Mohini Nayar and H. M. K. Saxena. Acta Cytologica 28 : No. 3 May - July 1984.
13. Chaudury, M. : Tuberculosis of the breast. Brit. J. Chest Disease. 195-199, 1957.
14. Josef Zajicek : Monographs in Clinical Cytology, Aspiration Biopsy Cytology. Part I. S. Karger. Basel 136-192.
15. Joseph A. Linsk and Sixten Franzen : Clinical Aspiration Cytology. Lippincott. 105-135.

★★★★★

Letter to the editor :

EXIT, THE PAP SMEAR

I felt very sorry about not being able to attend the IAC Conference in Bangalore. Although physically I was not in Bangalore, mentally I was there. But dreams are not realities and reality came crashing down, only to find that there were hardly any papers on Gynaec Cytology at the Conference.

The first thing that struck me was that the Pap smear for women had made an honourable exit. It just was not fashionable any longer to do a simple Pap test on a woman. The 400 odd Cytologists we have in India had progressed well but in a different direction. They were excelling in FNAC and early diagnosis of other Oncology problems but the problem of Cervical Cancer in Indian women remained as large as ever. Coupled with the decision of not granting teaching status to purely Gynaecological Laboratories there seems to be no future for Gynaec Cytology. The years of work put in to develop Cytology in India is at cross-roads. Who is going to think of the millions of women in India who are threatened by the prospect of dying from Cancer Cervix ?

To quote from Miller, the following are the global statistics of Cancer Cervix :

Year	Total Cases of Ca. Cervix	West	East
1975	4,60,000	21 %	79 %
2000	6,80,000	16 %	84 %

Miller feels that Cancer Cervix is now a third World health problem. The solutions are known and technology is simple. All that one needs is

resources and manpower. I had a frank talk with him and we feel that resources can easily be found. Money can come from developed countries and from International Agencies. But what about manpower ? No one can help us, unless we help ourselves. We have to find motivated people to undertake this project. Being an eternal optimist, I told him that it will happen in India although I do not know much about the rest of the third world countries. I thought by the year 2000 A.D. India could be removed from the list of third world countries. But today I am not at all sure. I am worried for the women in India who cannot throw away the shackles of early age at marriage, multiparity, & untrained attendants at delivery. Now the protection with Pap Smear and the multipronged attack which was envisaged to control both the incidence and mortality of the disease are not likely to succeed due to lack of manpower.

This epistle is directed to all thinking members of our academy and those with executive authority, but above all those who have a heart and feel for the women in India. Will they do something about this before it is too late ? My innings with the Academy are perhaps over. As I walk back to the pavilion, I have a lot of satisfaction to know that there are still some young batsmen left who will keep up the stand. I am now contemplating to concentrate on the Federation of Obstetric and Gynaecological Societies of India (FOGSI). This organisation is certainly motivated and oriented to doing something for the women. But they will still be incomplete without the Cytologists. Let us hope they are not disappointed.

Dr. Usha B. Saraiya.
Bombay

Phone: 20188

With Best Compliments from :

M/s. Dalvi Sales

Manufacturers and dealers in wooden, steel and upholstery furniture, hardware, building materials and timber merchant.

201, Deshmukh Road,
Tilakwadi, BELGAUM - 590 006.