THE
Journal of Obstetrics & Gynaecology of India

VOLUME XXXV No. 4 AUGUST 1985

Editorial

SAFETY OF LAPAROSCOPIC STERILISATION CAMPS

Laparoscopic sterilisation camps in rural areas originated in Maharashtra in 1973. Very soon it spread to Gujrat. In the last six years or so laparoscopic sterilisation camps have spread all over the country and millions of laparoscopic sterilisations are performed on camps every year. This reflects the inherent advantages of laparoscopy when employed for sterilisation in camps. But are our laparoscopic sterilisation camps safe from the patient's point of view?

There is no surgical procedure which is without complications. Laparoscopy is no exception. A mortality of 1 : 100,000 may be expected during laparoscopy. But from all accounts the mortality on our laparoscopic sterilisation camps seems to be at least 10 times higher than this. Can we accept this with equanimity? The exact cause of death in individual case of mortality can be pinpointed only if post-mortem studies are carried out. For various reasons this is not always practical. Sensitivity to local anaesthesis is commonly implicated as a cause of some of deaths. Perhaps it is not responsible for all the deaths attributed to it. But even if a death or two are proved to be due to it a test for sensitivity to local anaesthesia—whatever be its worth, need to be carried out in every case. Deep sedation causing respiratory depression and some degree of hypotension no doubt is contributory to many a deaths. The dose of sedatives administered should be the minimum required and must take into consideration the low weight of the patients commonly encountered on the camps. Gentle handling of the patients and allowing adequate time for optimal action of the sedatives and/or analgesics will go a long way in optimising their dosage. Vascular injuries caused by the pneumoperitoneum needle or the trocar are most lethal. Insertion of pneumoperitoneum needle or the trocar is often taken lightly and entrusted to the most junior member of the team. Why should it be so when this aspect of the procedure needs as much care and expertise as the rest of the operative steps? Certainly there are many other areas that need our watchful and critical attention. Each and every one of the deaths occurring on our camps must be scientifically investigated, thoroughly probed and critically analysed if we wish to avoid repetition of similar occurrence. Above all, every camps must be adequately equipped with personnel and paraphernalia to promptly treat any complication that may arise unexpectedly.

What is the morbidity that develops in

the patients who submit themselves to laparoscopic sterilisation on camps? I am afraid, no one knows it precisely. But on all counts, it must be much higher than tolerable, considering the scant attention to asepsis and neglect to properly sterilise the laparoscopes in between two cases. No one can get away with ignoring the basic principles of surgery. In an elective surgery like sterilisation which is not intended to deal with any pathology the morbidity is governed by—(i) amount of preoperative screening of the patient (ii) attention to fundamental principles of surgery (iii) care, skill and meticulous attention to details as provided by the surgeon and (iv) post-operative care. All these areas need an unbiased and critical look. There is ample scope for improvement in each of them—if we wish to minimise the morbidity.

What is the failure rate of laparoscopic camp sterilisations? Not many care to know. We have hardly any authentic studies wherein at least 90% of the patients are followed up for a minimum period of two years. It is feared that on some camps the failure rate it unacceptably higher—possibly 15 to 20 times higher than the reasonable maximum. The standard failure rate with laparoscopic sterilisation is 3 per thousand. It should never exceed more than 5 per thousand. There is a common tendency to blame the quality of the ring employed. We must, no doubt know the failure rate with a particular ring as depicted on properly executed clinical trials before that ring is introduced in our programme. Incidently, the physical dimensions and the memory of the ring can be checked by anybody with the help of a microscope with a micro-scale inserted in the eyepiece. The ring applicator is as crucial as the rings for achieving effective sterilisation. One can readily find out at laparotomy during hysterectomy or at minilap for puerperal sterilisation whether the ring applicator gives a tubal knuckle of minimum 12 mm length both when the first and the second ring is released. No doubt the substandard type of the ring and the kind of the ring applicator must account for part of the high failure rate. Certainly, part of the high failure rate must be due to lack of care and skill on the part of the surgeon. It is mandatory that the surgeon assures himself that the ring is applied precisely on the tubes to his entire satisfaction. But how many surgeons look for this check in each and every case?

There is tremendous scope to eliminate mortality, to minimise morbidity and to reduce the failure rate at our laparoscopic sterilisation camps. This calls for determined and sincere efforts on the part of everybody involved with these camps—administrators, organisers and surgeons. Yet there is so much that the surgeons can do by themselves. Utmost attention to asepsis, adequate sterilisation of laparoscopes and other equipment and precise execution of the surgical steps will certainly go a long way in making our laparoscopic sterilisation camps far safer for the patients.

—Mahendra N. Parikh

EVALUATION OF CERVICAL LESIONS BY COMBINED USE OF CYTOLOGY, COLPOSCOPY AND HISTOLOGY*

by

USHA SARAIYA

and

MAYA LULLA

SUMMARY

Colposcopy cytology are complementary and therefore should be used simultaneously as both methods mutually and continually control each other.

Further we found that combined cytologic, colposcopic and histologic co-relation was essential prior to treatment and it resulted in no false negatives at any levels affording full sefety against neoplastic disease to the patient

Introduction

Colposcopy is being widely used in western countries for precise diagnosis and management of pre-clinical lesions of cervix. However, it has not made an impact in developing countries like ours for many reasons. The most important reason being the cost and the lack of easy availability of the equipment and lack of trained personnel in this field.

This instrument is of vital importance to those who are actively involved in early diagnosis and management of cervical cancer. Initially cases were managed by the authors with the help of cytologic and histologic co-relation of cervical lesions, as the facilities of Colposcopy were not available. Although it was possible to treat cases of early cervical neoplasia with cytomorphic, histologic and clinical data, it was felt that occasionally cases were over or under treated and follow up involved greater risks.

A referral centre for Colposcopic evaluation was started in 1970 at P.T. Clinic of Sir H. N. Hospital, Bombay (INDIA). Gradually more and more cases were referred to this centre for colposcopic evaluation.

Since 1980, the authors have utilised all the 3 disciplines in the management of cases of cervical neoplasia. A higher pick up rate and a more accurate diagnosis are rewarding and of distinct advantage. However, increase in the time taken to make a diagnosis, repeated examinations and increased costs are factors to be considered. The fear of cancer causes a lot of tension and the patients request for a prompt and quick treat-

Paper read at 5th World Congress of International Federation of Cervical Pathology & Colposcopy at Tokyo in April 1984.

From the Colposcopy Clinic of Purshotamdas Thakurdas Clinic (Sir Hurkisondas Nurrotamdas Hospital) Raja Rammohan Roy Marg, Bombay-400 004 (India).

Accepted for publication on 23-3-85.

ment. They are unwilling for prolonged diagnostic work-up.

Hence this communication evaluates the role of using all three parameters.

Colposcopic findings were graded according to Coppelson and Reid's Classification.

We could make 27 groups of different combinations and of these 27 combinations some were well co-related, some showed minor grades of discrepancy and others showed major degree of discrepancy. The 3 types of combinations could be as follows:

I AC AH II BC BH III CC CH	Highly co-related
I BC AH II AC BH III BC BH	Minor discrepancy—difference of one grade above or below among 3 disciplines
I CC CH II AC AH III AC CH	Major discord—difference of more than one grade among 3 disciplines

Total number of cases where we had all 3 parameters were 100

Well co-related were	.. 76/100 cases 76%
Mild discrepancy	.. 13/100 cases 13%
Major discrepancy	.. 11/100 cases 11%

Grade I: Atypical colposcopic appearance of minor significance compatible with an overlapping histologic series from normal, metaplastic epithelium to minor dysplasias.

Grade II: Atypical colposcopic appearance of significance compatible with major dysplasia or Carcinoma in Situ.

Grade III: Atypical colposcopic appearance of high significance compatible with Carcinoma in situ or invassive cancer.

To co-relate Colposcopic findings with both cytology and histology, we had to narrow down cytology and histology to 3 gradings A, B, G where A. is compatible with normal, minor dysplasia. B. is compatible with major dysplasia and Ca-in-situ (Small). C. is compatible with C.I.S. (large) microinvasive cancer and invasive cancer.

Thus we had 3 Gradings in each discipline.

Colposcopy	Cytology	Histology
I II III	AC, BC, CC	AH, BH, CH

If difference of one grade above or below is also taken as within normal limits then good co-relation could be achieved in 89.0%. There were 13 cases of minor discord. Condylomatous lesions severe inflammation and changes due to menopause lead to difficulties in accurate diagnosis.

Major discord among the three disciplines poses a problem for the clinician. Fortunately, such cases are few. The final diagnosis is reached if there is mutual trust and co-operation among the cytologist, Colposcopist and Surgical Pathologist. Careful review of all the slides and of clinical data is required. Table I gives the cases of discord.

We review here the data of all the 11 cases showing major discord.

1. *Endocervical lesion*: There were 2 cases, both had carcinoma in situ high in the endocervical canal, which was diagnosed by cytology. Both these cases

TABLE I

	Cases
Cases of Discord	11
1. Endocervical lesion	2
2. Tuberculosis	2
3. Severe inflammation overdiagnosed by cytology	2
4. Torn lacerated cervix overdiagnosed by colposcopy	2
5. Forgotten IUCD	1
6. Prolapse with decubital ulcer	1
7. Post-rediation	1
Total	11

were asymptomatic and detected on routine cytology. Colposcopic evaluation was negative (Grade I) and colposcopically directed biopsy too was negative. One case underwent a cone biopsy which diagnosed the lesion. The other case had a hysterectomy which revealed the lesion. In both cases a review of cytology smears was conclusive of diagnosis and hence the correct treatment was given. Colposcopy is of little value when lesion is endocervical. However, in most cases there is a surrounding area of dysplasia which is seen on ectocervix.

2. *Tuberculosis*. There were 2 cases. This disease is still rampant in our country and should be considered as a differential diagnosis when a lesion is seen on the cervix. Both these cases were diagnosed clinically as friable growth suspicious of malignancy. However, cytology failed to reveal any malignant cells. Colposcopy showed variation in surface contour abnormal vessel and ulcerative lesion and was classified as Grade III lesion. Colposcopically directed biopsy showed tubercles and hence diagnosis was established.

3. *Severe Inflammation*: There were 2 cases of severe inflammation which were overdiagnosed by cytology. Colposcopy and histology did not reveal any abnormality. It is possible that the changes were due to viral or chlamydial infection. After prolonged treatment the smears reverted to normal.

4. *Torn lacerated Cervix*: Two cases had markedly lacerated cervix with ectropion which was bleeding on touch. Clinically an early carcinoma was suspected. Cytology did not reveal any abnormal cells. Colposcopic findings were graded as Grade III in view of abnormal vessels punctation and acetowhite areas. However, biopsy did not reveal any malignancy. With prolonged treatment, the lesion regressed.. No further treatment was necessary.

5. *Forgotten IUCD*: This case presented as a case of post-menopausal bleeding. Clinically the cervix was atrophic, vault was cicatrised and there was a granulomatous growth. A short IUCD thread was felt but not seen. There was severe trichomonal discharge. Cytology revealed abnormal cell suspicious of invasive cancer. After treatment with metronidazole, Colposcopy was performed. It revealed a granulomatous growth with marked cicatrisation of the vault. There were abnormal vessels. The whole area was bleeding on touch. The thread of IUCD could be seen. It was graded as Grade III. Patient had a D/C, loop removal and multiple punch biopsies. There was no evidence of malignancy. Patient received treatment with exogenous estrogen for three months and follow-up cytology and colposcopy were normal. Patient had inserted a loop 10 years earlier and had forgotten about it.

6. *Prolapse with decubital ulcer*: This case was a menopausal patient with a prolapse and a bleeding infected ulcer. Cytology revealed only inflammatory smear pattern. Colposcopy was graded as Grade III. There was an ulcer with irregular edges and abnormal vessels. There

were many acetowhite areas. Biopsy revealed an undifferentiated invasive carcinoma. Patient was treated by a Schauta operation.

7. *Post Radiation*: This patient had undergone a Wertheim Hysterectomy followed by radiotherapy. At 6 monthly follow-up there was a small friable mass at the vault. Cytology report indicated marked radiation changes, inflammation marked, recurrence of malignancy cannot be ruled out. On colposcopy there was a Schiller positive area. Hence the findings were graded as Grade III suspicious of recurrence of malignancy, Colposcopically directed biopsy failed to reveal malignancy. The tissue was granulation tissue. Patient was followed-up and is now disease free.

Radiation leads to glycogen depletion of cells and hence Schiller positive areas are seen which are deceptive.

Discussion

In India, the emphasis on diagnosis is beginning to shift from late cases to early cases of cervical cancer. This is due to the introduction of cytology in many of the centres in the last 10 years. The introuction of Colposcopy will further improve the quality of management of these cases.

The results of this study clearly demonstrate the value of colposcopic evaluation of cases with abnormal smears and cases with clinical suspicion of cancer. The pickup rate of cervical cancer with colposcopy alone was 13% in non-suspicious group. Co-relation of colposcopy with cytology revealed an accuracy of 93%.

However, in a small but significant number of cases there is discord. Further careful evaluation is mandatory.

Correct diagnosis must precede treatment. This communication analyses the pitfalls encountered by us. With co-operation from all concerned the cases could be correctly diagnosed and managed.

The cases of discord serve as a continuing reminder that no single technique can hope to understand substantially a process as complicated and as predictable as carcinogenesis.

The incidence of cervical cancer will continue to be very high in our population because of high incidence of early marriage and multiparity. Neglected cervical tears and untreated cervicitis seen in clinical practice lead to high incidence of abnormal colposcopic findings. Disease spreads very fast when invasion starts and facilities for treatment are limited. Hence in the absence of colposcopy biopsy rate should be generous and most abnormal looking cervices should be biopsied to exclude malignancy.