

## LAPAROSCOPIC STERILIZATION CAMPS — A RETROSPECTION

by

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### *Introduction*

Since the introduction of mass rural laparoscopic sterilization camps the procedure has proved highly acceptable, economical, speedy and safe. The author has performed 10,100 laparoscopic Falope ring sterilizations in 1979, 13,346 in 1980, 33,525 in 1981, 59,380 in 1982 and 11,741 till April, 1983. In spite of many million couples requiring sterilization, disturbing trends have emerged in many states, threatening to strike at the very roots of the programme. These deficiencies relate to the organisation of the camps, selection of cases, pre-operative preparation, adequate experience of the operating surgeon, inadequate drugs, improper maintenance and malfunctioning of equipment and post-operative care and follow-up.

*Organization of Camps:* During the initial phase, it was relatively easy to draw large crowd of mainly self-motivated acceptors. The management of such large crowds in small places left much to be desired.

At various places, adequate staff was not available for proper counselling; the guide-lines for pre-operative selection and preparation could not be adhered to; shelter from the inclement weather conditions was not provided for; water and electricity supplies were erratic with no lanterns in case of power failure; milk

was not provided for the infants when the mothers could not nurse them following the operation. Husbands and relations waiting outside were unaware of the progress inside the operation theatres.

Often altercations developed between the relations and the para-medical staff, vitiating the whole atmosphere.

In camps where vaginal manipulation was practised, the inconvenience caused to women wearing shalwar and churidars as well as the embarrassment caused to the women and their relatives was responsible for a lean attendance in the very next camp.

Once the backlog of self-motivated couples was exhausted, these deficiencies have made the task of further motivation more difficult, calling for more concerted efforts.

A joint venture of the government and voluntary agencies is ideal for proper utilisation of resources; but internecine arguments result from the desire to claim the credit.

Government officials, politicians and social workers become gradually apathetic. Voluntary agencies, despite their enormous resources lack in personalised services, while mass sterilization programmes need persistent motivation.

Camps are arranged without adequate publicity through the various media; and at times the programme is changed at short notice, throwing everything into disarray. The transport to and fro is often not provided, for want of vehicles and petrol. Patients and relations find it difficult to

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make their own arrangements specially for the return journey.

*Selection of cases and pre-operative preparation:* As already emphasized (Mehta and Bandoowala 1980) pregnant, puerperal and post-abortual cases and those with previous laparotomy scars are best avoided to ensure a low complication rate. Many such cases and also some with gross systemic diseases are missed due to a deficient pre-operative screening in presence of large crowds of acceptors and inadequate members of medical and paramedical staff. Similarly, a routine urine analysis and Hb estimation are omitted with risk of grave repercussions.

An expanded immunization programme for rural areas is designed, amongst others, for tetanus immunoprophylaxis of the expectant mothers. In cases where sterilization follows a recent home delivery, risks of tetanus are high if such immunisation has not been offered.

Often, acceptors are rejected on the operation table when the risk factors have been overlooked during the pre-operative screening. This often disheartens the keen acceptor and creates a sense of uncertainty amongst those awaiting their turns.

The supply of quality and potent drugs used for pre-medication is lacking and it is not unusual for patients to feel the pain and shout during the procedure, thus alarming waiting crowd.

*Experience of operating Laparoscopist:* The art of laparoscopy being a highly skilled technique, Steptoe has recommended at least 1,000 procedures and Phillips 500 procedures in hospital under expert supervision, before a laparoscopist can operate independently in camps. In target oriented and time-bound programme, chances of inadequately trained laparoscopists conducting camps are high with

resultant complications. Sterilizations being monotonous and repetitive procedures, require dedication and patient doctors, a quality not found in everyone. Theoretical instructions are highly inadequate and most districts do not have any library. Text-books on laparoscopy are often not available even in the metropolitan cities.

A budding laparoscopist should acquire proficiency initially in diagnostic procedures before attempting sterilization. At a later stage, he can train himself for the 'no exposure' technique offering several advantages due to the elimination of vaginal manipulation.

*Drugs and Equipment:* In view of potential dangers of laparoscopy, emergency drugs should be readily available at each camp site. Like a pilot before a flight, the laparoscopist should maintain a check list of the important drugs, instruments and equipment.

The equipment should be properly maintained and enough spares should be at hand. It is highly paradoxical that while import of new laparoscope system is exempted from custom duty, spare parts are not. Due to wear and tear, the lens system, tongs and spring malfunction and this lead to the cancellation of several camps as no facilities for repairs or replacement are available.

A large number of laparoscopists use air instead of carbon dioxide for insufflation with the subsequent risk of air embolism. This is because carbon dioxide cylinders are difficult to procure and more difficult is to obtain the permission for refilling from the Department of Explosives at Nagpur. Sufficient centres for refilling the gas are also not available all over the country.

In India, there is no quality control for the rings used in banding, similar to the criteria of FDA in U.S.A. Adherence to

strict criteria in the selection of the rings will prevent the failure rates due to the breakage of rings. Defective rings can cause the severest blow to the programme.

*Post-operative care and follow-up:* Once she has undergone the sterilization, the acceptor experiences lack of individual attention and counselling. Adequate antibiotics and analgesics are not given to cut costs. Since it is a quick and easy procedure motivators, health visitors and field staff often think unnecessary to followup. Morbidity and mortality can be avoided if quickly noted and treated. If a non-absorbable stitch is taken, the patient is forced to come after a week for follow-up. Unfortunately, such is not always the case, as some use an absorbable stitch to avoid inconvenience of revisits. A few others do not take stitch at all and there have been cases of herniation of omentum undergoing necrosis.

A patient visiting the local medical centres for any complaints after the sterilization is often asked to contact the operating laparoscopist, now thousands of kilometers away. Thus unattended insecure patients develop distrust in health delivery system. Luteal phase and method-failure pregnancies due to lack of pregnancy termination facilities have to undergo another ordeal and face humiliation in orthodox village society. These cases are cited as examples, which go against the

programme. After the sterilization, the children of the acceptors do not get extra medical care and attention, which is essential to insure the health of living children. Recanalisation promised, is not done in genuine cases of unforeseen infant deaths.

#### *Conclusion*

For the desired projection to stabilise the birth rate at 25 per 1000, camps approach through quick safe economical and easy laparoscopic sterilization technique is not a dream but reality to be experienced.

Commitment of policy makers, medical and paramedicals to satisfy the masses approaching for this successful programme is the only hope to save the bleak future.

The vastness of the work asks for many well trained doctors in this technique who should be given exemption from income tax if they serve the rural population. Thus brain drain will stop and many emigrating doctors will find solution of this livelihood and desire to serve their country.

The availability of servicing centres and enough spares will percolate the confidence in fulfilling the committed camps.

#### *Reference*

1. Mehta, P. V. and Bandoorkwala, I. B.: J. Obstet Gynec. India, 30: 739, 1980.