

also.

SHORTCOMINGS

Although the shortcomings of laparoscopic colonic surgeries are probably higher than the risk in open surgery, the risks are probably greater because of surgeon's inexperience with the laparoscopic procedure. Having experienced proctors minimizes the risk of complications attributed to inexperience. With the present technology and in view of the various shortcomings, the most practical approach is to perform the mobilization and preliminary mesenteric division laparoscopically, followed by exteriorization of the mobilized segment through a small incision in the abdominal wall and subsequent resection and anastomosis. Using this technique, the procedure is not unnecessarily prolonged, costly or difficult and the shortcomings can be overcome. Should the conditions not exist for a safe and relatively short laparoscopic procedure, the operation should be converted to the traditional open one. This is not to be seen as a sign of inadequacy or failure, but rather one of a surgical maturity and good judgement.

MINIMALLY INVASIVE SURGERY FOR ANAL DISEASES

Fistula in ano – the commonly performed procedures for fistula like fistulotomy and fistulectomy left very large wounds necessitating painful defecation and painful dressings for long durations. The development of the core out technique with a step ladder excision of long fistulous tracts has resulted in reducing the morbidity of fistula surgery.

Excision with primary closure and other forms of **flap transfers** have been described but are not particularly popular.

Biological glues and **collagen plugs** to make the fistula surgery even less traumatic are under investigation and preliminary use. They hold significant promise for a change in the approach to anal fistula surgery.

STAPLED ANOPEXY

Excisional hemorrhoidectomy has been the most definitive and reliable treatment of both internal and external hemorrhoidal disease till recent past. In 1997, Antonio Longo introduced a new technique. This operation utilized a modified circular stapler, inserted through the anus, and used to excise a circular ring of mucosal tissue from the anal canal, well above the dentate line. The absence of making any incision in the anoderma results in maintenance of normal anal anatomy and restoration of normal physiological function. It improves cosmesis and allows rapid healing. The indications of stapled

anopexy are almost the same as for Milligon-Morgan hemorrhoidectomy. The patients with fourth-degree hemorrhoids that is, irreducible internal hemorrhoids – may not be good candidates for stapled anopexy. Abscess or gangrenous hemorrhoids are absolute contraindications, because these conditions will not be treated by stapled anopexy. Concomitant fistulotomies, sphincterotomies, biopsies and excisions can safely be performed, along with stapled anopexy. There is a rapidly growing body of evidence regarding the efficacy of stapled hemorrhoidectomy. The operative time for stapled anopexy has been demonstrated to be shorter than excisional hemorrhoidectomy. The main benefit of this operation is reduced pain, which also translates into quicker return to work or normal daily activities. Most of the trials report similar incidence of delayed bleeding between stapled and excisional groups.

Overall stapled anopexy is a safe and effective procedure for hemorrhoids that offers a less painful alternative to excisional hemorrhoidectomy. If the results continue, as they are presently, then stapled anopexy may become the new standard of care for the operative treatment of internal hemorrhoids.

The principles of minimally invasive surgery as applied to colorectal diseases have led to the development of newer techniques for providing a safe and satisfactory outcome with a heightened patient acceptability. Till now the disadvantage of high cost has been a problem which on the analysis of savings by way of reduced pain, hospital stay, early return of bowel activity leading to an early return to work makes the overall expenditure much more acceptable than was hitherto thought. It is now a responsibility of those who utilize these techniques to propagate them and with adequate training make sure that the facility of minimally invasive colorectal surgery becomes available to a large number of patients with no additional harm.

In the past few years that I have delved in the development of colorectal surgical techniques I have had the good fortune of being helped assisted by a series of colleagues in the Department whose contributions have been of immense value and I extend my grateful thanks to all of them. I am thankful to Ms Pooja for the excellent secretarial work.

RECOMMENDED READING

1. *Shackelford Surgery of Alimentary tract, 5th Edition, 2003. Laparoscopic colorectal Surgery, Page 204, Chapter 15. Tonia M Young Fadok*
2. *Corman Colorectal Surgery, 5th Edition 2005. Laparoscopic colorectal Surgery, Page 1225, Chapter 27. Marvin L Corman*
3. *The EAES Clinical Practice Guidelines on Laparoscopic resection of colonic cancer, Page 161. Chapter 8 of EAES Guidelines for Endoscopic Surgery. Neugebauer EAM, Sauerland S, Fingerhut A et al.*

ETHICAL GUIDELINES FOR BIOMEDICAL RESEARCH

The need for uniform ethical guidelines for research on human subjects is universally recognised. It has acquired a new sense of urgency as the critical issues in the area of biogenetic research involving human subjects have become acute. Apart from the mandatory clinical trials on new drugs, a number of diagnostic procedures, therapeutic interventions and prevention measures including the use of vaccines, are being introduced which involve human subjects. Further the advent of new medical devices and radio-active materials and therapeutic benefits of recombinant DNA products have added a new dimension to the ethical issues that need to be considered before evaluating these for their efficacy, utility and safety.

Any research using the human beings as subjects shall bear in

mind the following principles of : i) **essentiality**, (ii) **voluntariness**, **informed consent**, (iii) **non exploitation**, (iv) **privacy and confidentiality**, (v) **precaution and risk minimisation**, (vi) **professional competence**, (vii) **accountability & transparency**, (viii) **maximisation of public interest and distributive justice** (ix) **institutional arrangements** (x) **public domain** (xi) **totality of responsibility** and (xii) **compliance**.

Recent advances in the field of **Assisted Reproductive technologies, organ transplantation, Human genome analysis, and gene therapy** promise unquestionable benefits to mankind. At the same time, they raise many questions of law and ethics, stimulating public interest and concern.

(Source : ICMR Publication 2000)