

## Open versus Closed Lateral Internal Anal Sphincterotomy for the Treatment of Fissure in ANO - A Rural Indian Experience.

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**Abstract:** The study was undertaken to compare the healing and complications of open and closed lateral internal sphincterotomy. 146 patients who underwent lateral internal sphincterotomy at our centre as a single procedure over the period of four years were studied. Open sphincterotomy was done in 52 and closed sphincterotomy was done in 94 patients. A questionnaire about clinical outcome, complications, continence and degree of satisfaction with the procedure was asked to all the patients during follow up personally and telephonically. Average follow up (1-4) 2 years. Postoperative Pain 5 day's OIS Vs 2 days. Bleeding 3.8% OIS Vs 0% CIS. Urinary retention 11.5% OIS Vs 0% CIS. Recurrence of Fissure 3.1% OIS vs. 5.4% CIS. Need for reoperation none. Difficulty in controlling the gas 30% OIS Vs 9% CIS. Soiling of underclothing 26.7% Vs 16% p<0.001% and accidental bowel movement 11.8% OIS Vs 0% CIS P<0.001. And is statistically significant. 90% patient showed overall satisfaction. More patients undergoing CIS (71%) Than OIS (29%) were satisfied with the results of procedure. **Conclusion:** Lateral anal sphincterotomy is highly effective in treatment of fissure in Ano, but closed Sphincterotomy is preferable to open sphincterotomy because it effects a similar cure rate and less complications.

### INTRODUCTION

Fissure in ano is a longitudinal ulcer in anal canal. In 70% Cases it is present in midline posteriorly and in 30 cases it is present midline anteriorly. This is a very painful condition. Its exact etiology is not known. Surgical treatment is offered to those patients who are not responding to medical treatment for one month. There are various surgical methods of treatment of anal fissure like anal dilatation, fissure excision, fissure excision with sphincterotomy, open lateral anal internal sphincterotomy and closed anal internal sphincterotomy. Each of these procedures has their merits and demerits. Present study was conducted to compare the cure rate and complications of open anal internal sphincterotomy and closed anal internal sphincterotomy.

### MATERIAL AND METHODS

144 Patients of fissure in ano were operated at our centre over period of four years. Lateral internal anal sphincterotomy was done as a single procedure. Open sphincterotomy done in 52 and closed sphincterotomy done in 94 patients. Single enema was given in the morning before surgery. Open sphincterotomy was done under spinal anaesthesia. Patient put in lithotomy position and incision given in intersphincteric groove, internal anal sphincter dissected and divided. Wound packed with sterile gauze. Patients discharged after 24-48 hours. Closed sphincterotomy was done as an outdoor procedure under local anaesthesia. Patient put in lithotomy position and no 11 blade on scalpel inserted in intersphincteric groove, rotated medially and pulled out to cut internal anal sphincter taking care not to cut anal mucosa. During post operative period patients observed for various complications. A questionnaire about complications and clinical outcome asked to the patients during follow up personally and telephonically. Average period of follow up was (1-4) 2 Years.

### RESULTS

During Postoperative period there was bleeding in 3.8% patients OIS group and there was no bleeding in CIS group. Urinary retention occurred in 11.5% in OIS Vs 0% in CIS group. In open Sphincterotomy patients there was significant pain for 5 days and in closed sphincterotomy patients there was significant pain for 2 days. There was no infection in any of patients. In closed sphincterotomy group there was recurrence 5.95% patients where as in open sphincterotomy group there was recurrence

in 3.1% of patients. There was difficulty in controlling flatus in 30% patients in open sphincterotomy patients and 9.6% closed sphincterotomy group, soiling of underclothes occurred in 26.7% patients in open sphincterotomy group and 16.1% in closed sphincterotomy group, accidental Bowel movement occurred in 11.8% patients of open sphincterotomy group and in 0% in closed Sphincterotomy group P<0.001. 90% of total patients reported overall satisfaction, and more patients 71% undergoing closed internal sphincterotomy than open internal sphincterotomy 29% were satisfied with the results of procedure.

### DISCUSSION AND CONCLUSION

Post operative complications such as pain, urinary retention and bleeding were more in patients Undergoing open internal sphincterotomy as compared to patient undergoing closed sphincterotomy. In open sphincterotomy patients surgery was done in spinal anesthesia and Hospital stay was more it was more costly as compared to closed sphincterotomy procedure. Recurrence rate was insignificant in both groups and there was no need for reoperation any patient. There was significant incontinence to flatus and faeces in patients undergoing open Internal sphincterotomy. 90% of patients reported overall satisfaction and more patients undergoing closed internal sphincterotomy were satisfied with the results of the procedure as there was less complication rate, it was OPD procedure, cheaper, less painful and continence function was better. It can be concluded that lateral internal anal sphincterotomy is highly effective in treatment of anal fissure but closed internal anal sphincterotomy is preferable as compared to open internal anal sphincterotomy because it effects a similar rate of cure with low complication rate and less impairment of continence.

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