

## POSTOPERATIVE TRANSVAGINAL SONOGRAPHY (TVS) IN PATIENTS UNDERGONE COMBINED COLORECTAL AND GYENCOLOGICAL RESECTION OF BOWEL DIE; A PIONEER PROSPECTIVE STUDY.

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Context:

Management of Bowel endometriosis.

Objectives:

Correlating postoperative TVS findings with different combined colorectal and gynaecological interventions for bowel deep infiltrating endometriosis (DIE).

Methods:

Prospective study of consecutive women underwent surgery for endometriosis between 2011 – 2016. Patients with suspected bowel endometriosis and were scheduled for combined intervention for bowel DIE. All women underwent detailed †deep endometriosis scan' and colonoscopy to map disease location and extent. Procedures were done laparoscopically by a gynaecologist and a colorectal surgeon. Historical, demographic data, pre-, post-operative symptoms, and details of combined procedures including surgical outcomes were collected. Standardized TVS was conducted for all those who followed up. Simple and advanced statistical analysis was performed using SPSS v24 software.

Patients: 339 consecutive women underwent endometriosis surgery. 63 (18.5%) women with stage IV bowel endometriosis were included in the study. 25 patients were successfully followed up with questionnaire and TVS.

Interventions: Combined laparoscopic bowel resection, rectal shave or rectal disc excision.

Main outcome measures: Sliding sign and DIE recurrence on follow up TVS.

Results: The mean follow up was 50.2 months from surgery. 52% had previous laparoscopy for endometriosis with mean age of its onset at 23.6 years. Pre-operatively, 52% and 24% of endometriotic nodules were in the anterior rectal wall and rectosigmoid junction respectively. 56% women had segmental bowel resection, 40% had rectal wall shave and remaining had rectal disc excision. Sliding sign was negative in 60% of the women prior to surgery. However, only 36% of patients revealed negative sliding sign on follow up. 7 (28%) patients had converted from negative to positive status, whilst only 1 showed the opposite. 71.4% of those restored to positive status had undergone bowel resection procedure. 9 patients had DIE recurrence of anterior rectum, 44% of them underwent rectal shave only. Conclusion:

This is the first study to investigate the effect of different combined bowel DIE interventions on

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postoperative TVS findings. There is significant improvement in restoration of sliding sign across all interventions. Laparoscopic bowel resection was superior to other interventions in negative to positive conversion of sliding sign. However, there was no difference in type of intervention vs recurrence of DIE.