

Does abdominal hysterectomy affect  
anorectal function and quality of life?

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# Background

- Abdominal hysterectomy has been shown to affect bowel function in retrospective studies. (Ref)

# Methods

- 30 patients awaiting abdominal hysterectomy for benign disorders were prospectively recruited.
- Assessed preoperatively and 4 months following hysterectomy by
  - Anal manometry
  - Defaecatory proctogram
  - Colonic transit
  - Endoanal ultrasound

# Methods

- QoL assessment by EuroQol
- Cleveland continence score
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- Bowel questionnaire

# Methods

- Exclusion criteria- previous bowel or anorectal surgery and inflammatory bowel disease.
- SPSS 10 was used for analysis.
- Ethical approval was obtained.

# Defaecatory Proctogram

	Hysterectomy (Preop)	Hysterectomy (Postop)
Rectocele	25(85%)	25(85%), p= .1
Intussusception	18(60%)	15(50%), p=.18
Cough incontinence	4	5, (p=.70)
Pelvic floor descent	26(90%)	27, p=.31

# Anal manometry

	Hysterectomy (Preop) (Mean)	Hysterectomy (Post op)(Mean)
Resting pressure (Cms of Water)	82	83, p=.91
Squeeze Pressure (Cms of Water)	170	166, p=.68
First sensation	24	31 (p=.01)
Flatus	72	90 (p=.01)
Maximal tolerated Volume	224	212, p=.11

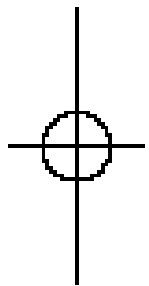
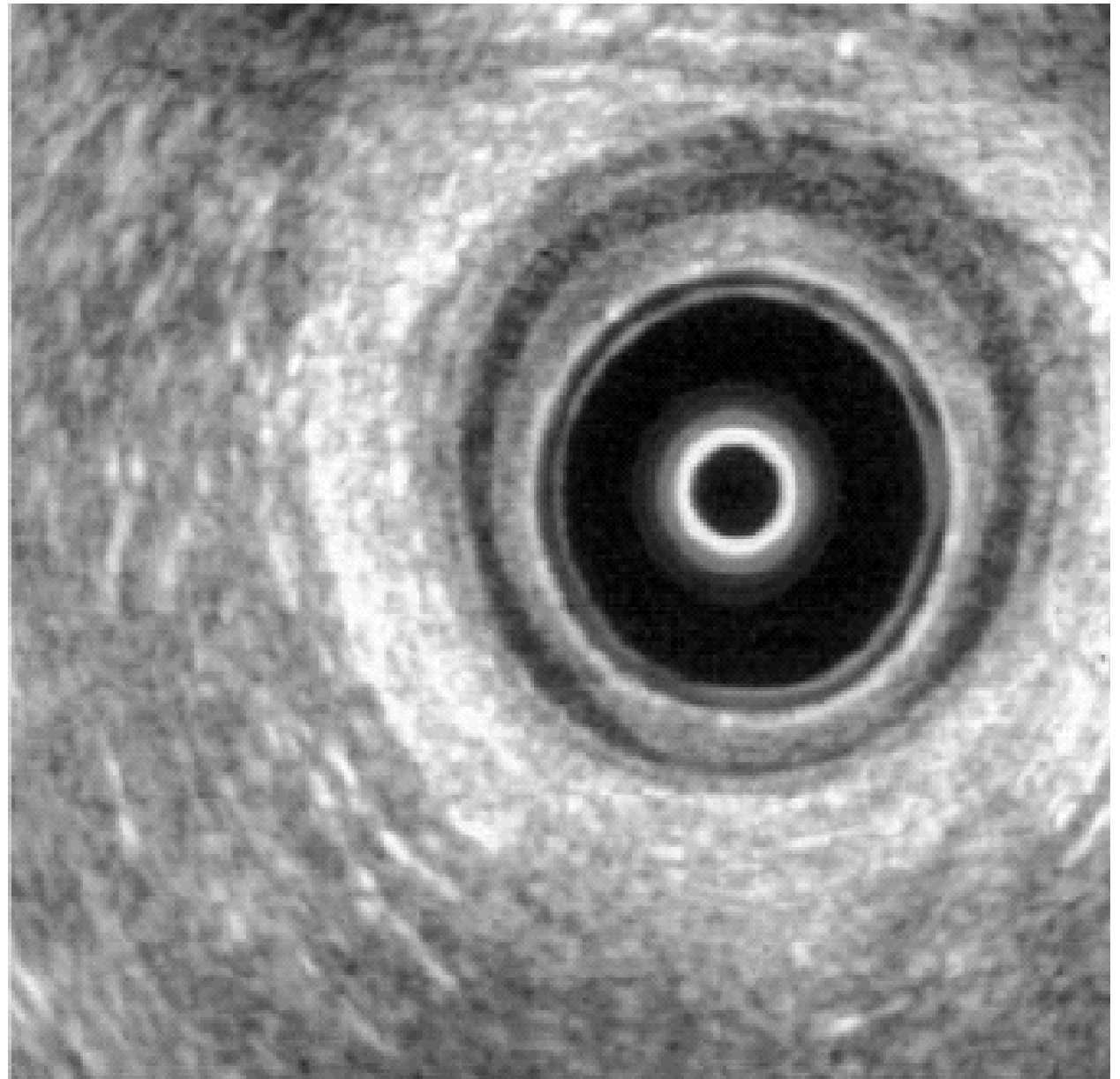


FIGURE 11.17. Endo-anal scan showing deep



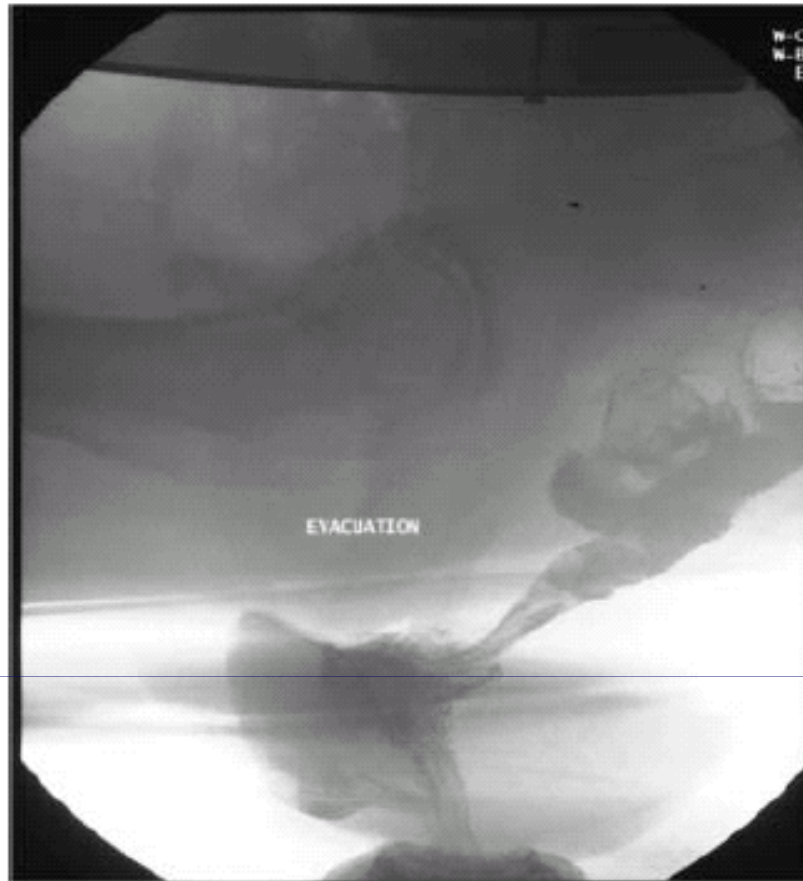


FIGURE 11.7. A moderate rectocele.



FIGURE 11.11. Maximal squeeze pressure.

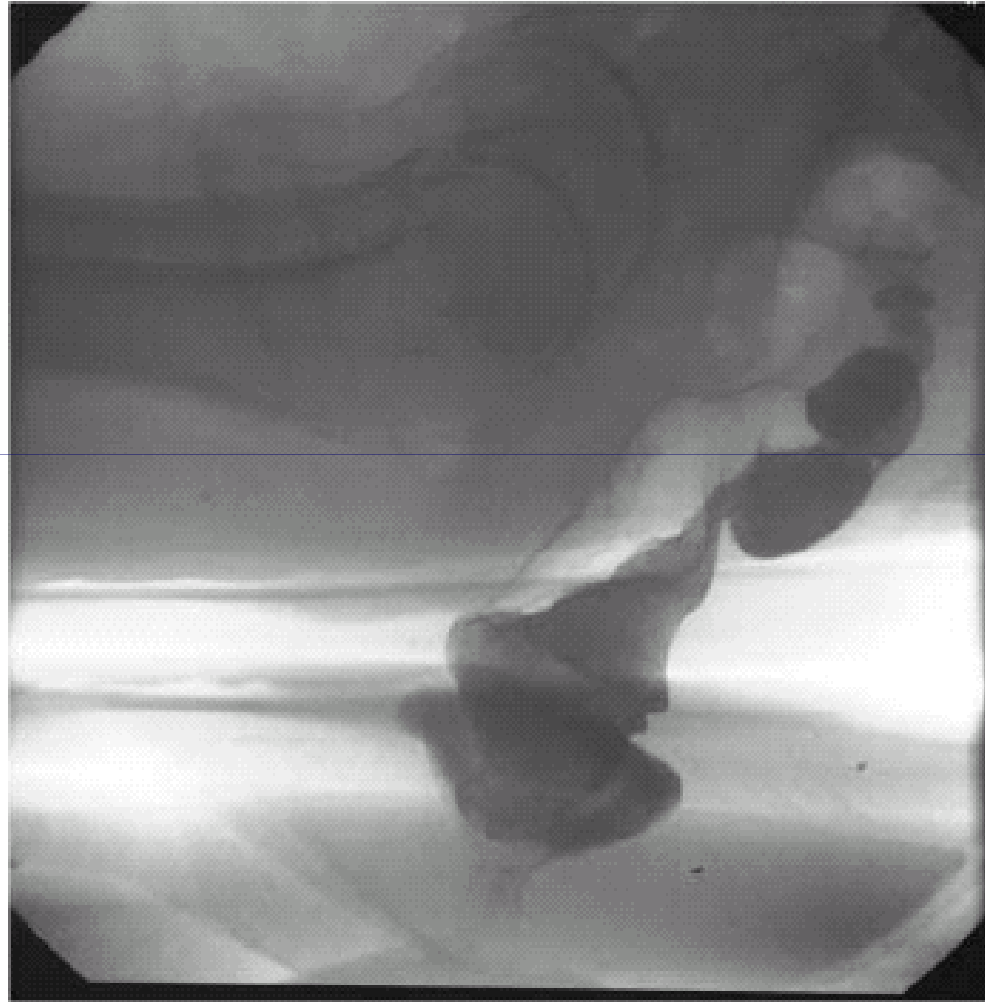


FIGURE 11.9. Coexisting rectocele and intussusception.

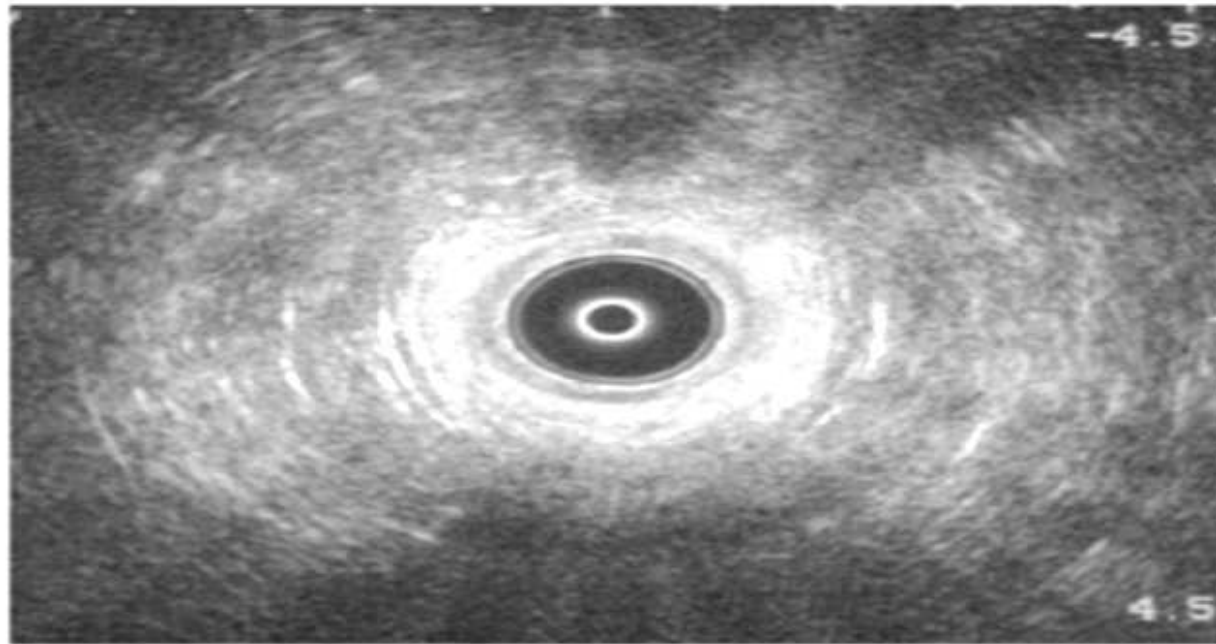


FIGURE 11.15. Endo-anal scan showing superficial level.

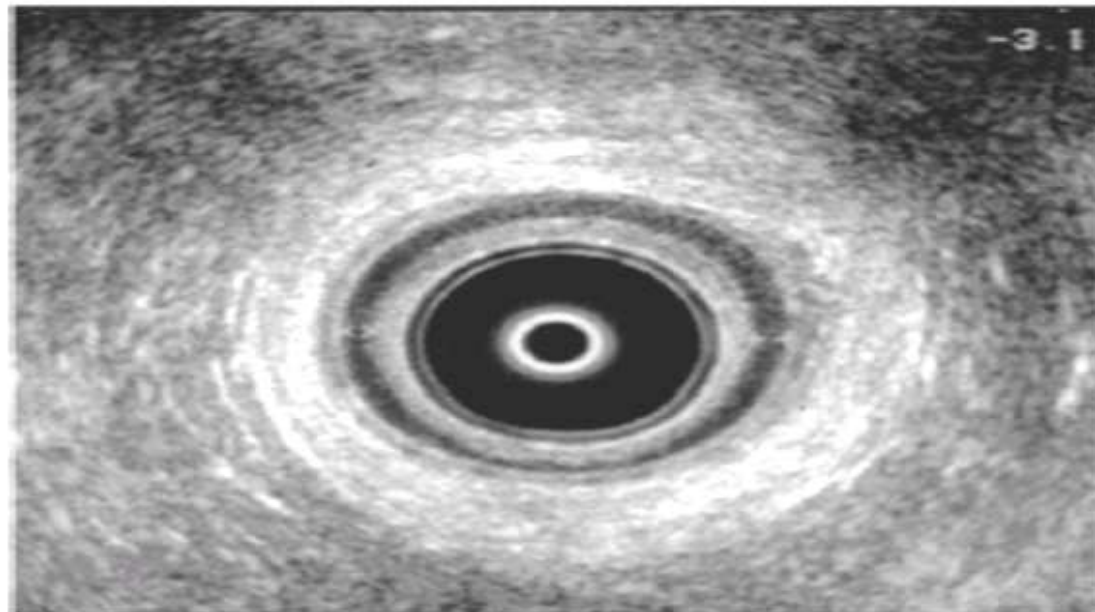


FIGURE 11.16. Endo-anal scan showing mid level.

# Quality of life

- SF-36 (Domains)
- Paired samples t-test- Bodily pain improved,  $p=.01$
- General health transformed,  $p=.03$
- Post vitality improvement,  $p=.003$
- Emotional role improved,  $p=.006$
- Overall health improved,  $p=.000$

# Results

- Endoanal ultrasound normal in all patients pre and post op
- Colonic transit- two were abnormal preop and became normal post op

# Quality of life

- SF-36 (Domains)
- Wilcoxon signed rank test- Bodily pain improved,  $p=.009$
- General health transformed,  $p=.05$
- Post vitality improvement,  $p=.003$
- Emotional role improved,  $p=.009$
- Overall health improved ,  $p=.000$

# Quality of life

- Euroqol
- Paired samples t-test
- Thermometer-patient' own assessment, significant improvement,  $p=.004$
- Tariff-, nosignificant difference,  $p=.334$
- Wilcoxon, non parametric
- Thermometer improvement,  $p=.003$



# Quality of life

- Cleveland continence score-parametric and non-parametric-no significant change
- Bowel symptom score- - parametric and non-parametric-no significant change

# Summary

- The median age of the patients was 43 years (range 32-65).
- First rectal sensation and ability to sense flatus was prolonged after surgery and was significant ( $p=0.01$ ).
- Resting anal pressure, squeeze pressure, maximal tolerated volume, colonic transit time, pelvic floor descent were unaffected by surgery.
- Rectocele and intussusception were noted in 85% and 50% of the patients respectively before surgery, which persisted after hysterectomy.

# Summary

- Endoanal ultrasound showed normal sphincters in all patients.
- SF 36 scores showed statistical improvement in quality of life following surgery in 8 domains.
- EuroQol also showed improvement.
- Cleveland continence score and bowel scores were unaffected.