Diagnostic and therapeutic laparoscopy performed in the Day Surgery Unit: indications, pre-surgical management, investigations and outcomes.

Amokrane N, Le Bas A, Ofuasia E, Collaris R.

Croydon Health Services NHS Trust

Background NICE guidelines published in 2017 advise on diagnosis and management of endometriosis[1]. Our hospital has no local guideline. Our practice was audited using the NICE guidelines as gold-standard, to assess practice patterns and identify areas for improvement.

There should be an index of suspicion in any woman (including those aged below 17) presenting with 1 or more of the below symptoms:

- *Chronic pelvic pain*
- *Period-related pain (dysmenorrhoea) of a severity affecting daily activities and quality of life*
- *Deep pain during or after sexual intercourse*
- *Period-related / cyclical gastrointestinal symptoms, in particular, painful bowel movements*
- *Period-related / cyclical urinary symptoms, in particular, blood in the urine or pain passing urine*
- *infertility in association with 1 or more of the above.*

It is important to avoid undue delay in diagnosis. Different organ systems being involved can make diagnosing endometriosis challenging, as can other conditions mimicking endometriosis symptoms. There are some features that may raise the index of suspicion and could lower threshold for referral and/or interventions. Finally, not everyone needs surgery, as a proportion of women will respond to hormonal treatment[2].

Audit Standards We took the NICE recommendations as our gold standard therefore, prior to surgery all women should have had:

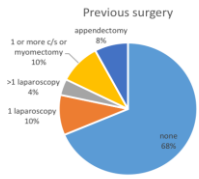
- Advice to keep a symptom diary
- Pelvic & abdominal examination
- Transvaginal pelvic ultrasound
- 3 month trial of either paracetamol, NSAIDs or both
- 3-6 month trial of hormonal management
- Alternative treatment offered after negative laparoscopy

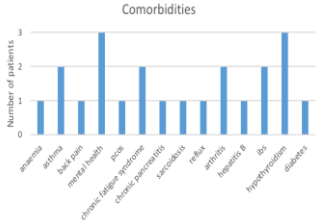
Methods Retrospective analysis of 50 patients undergoing diagnostic laparoscopy in a 3-month period (Oct-Dec 2019), using clinic letters, theatre lists and operation notes.

Results

Mean age: 30.8 years (range 18-49)

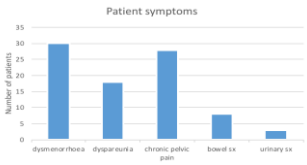
18/50 (36%) women had comorbidities.





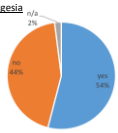
Pre – surgery

Symptom diary = 1/50= 0.5%.
Pelvic exam = 12/50 = 24%.
TVS = 39/50 = 78%.
TVS+MRI =7/50 = 14%

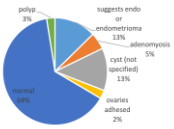


Intraoperative assessment and management

Trial of analgesia

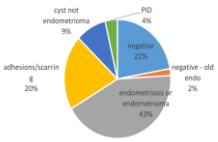


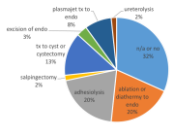
Trial of hormonal management



US findings

Laparoscopy findings





Laparoscopy treatment

- 9 women had no imaging prior to surgery and of these, 6 also had no pelvic examination.
- 41/50 (82%) women had imaging (TVUS and/or MRI) prior to surgery
- 12/41 (29%) had pos. imaging findings, 10/12 (83%) of these had pos. laparoscopy findings.
- 29/41 had a neg. imaging; 19/29 (65.5%) had a positive laparoscopy.
- Overall 12/50 (24%) had a negative laparoscopy – 11/12 of these women had had normal imaging.
- Pelvic Survey comprehensively documented in 82%

Conclusions & Discussion

- There is scope to improve pre-surgery pelvic exam & imaging.
- There is scope for maximising analgesia & hormonal treatment.
- Positive US findings yield the highest a-priory likelihood of sign. findings on laparoscopy, especially if combined with abnormal VE, though not all of these will be endometriosis.
- Those with negative findings on both US and VE are least likely to have abnormal laparoscopy findings. Particularly in these women it may be justified to initially defer surgery and offer optimisation of analgesia and hormonal treatment.
- Pos. laparoscopy findings are quite common despite negative US findings, justifying surgery after failed analgesia & hormonal management.
- Comprehensive documentation of laparoscopy findings is vital to be confident no endometriosis is missed and for handover of future care.
- 24% negative laparoscopy rate is difficult to benchmark[3]; better pre-operative assessment & management could potentially reduce this.

References
1. NICE Guideline [NG73]Endometriosis: diagnosis and management, 2017
2. Moawadia-Kiles, K. et al. The characteristics of women recommended a laparoscopy for chronic pelvic pain at a tertiary institution. AIMJOG 2019; 19 (1):123-33
3. Jarrell, J. & Arnold-Nielsen, L. Negative laparoscopy unveiled. JRPP'2008; 18 (1):18-21.