

WHICH TESTS SHOULD WE BE USING FOR DECISION MAKING IN THE PELVIC FLOOR MULTIDISCIPLINARY MEETING?

Hypothesis / aims of study

In our tertiary referral pelvic floor unit, routine assessment of patients with pelvic floor defaecatory dysfunction encompasses telephone triage clinic with symptom assessment as geographical and time constraints do not allow all patients to attend consultant clinic. Patients then undergo anorectal physiology (ARP), defaecation proctography and total pelvic floor ultrasound (endoanal, transperineal, transvaginal). A management plan (biofeedback (BFB) or BFB with a clinic appointment to discuss surgery) is made in a multidisciplinary meeting (MDM).

The above tests are widely used to investigate pelvic floor defaecatory dysfunction but the clinical utility and impact that each test has on clinical decision making is not known. Patients who are not undergoing any surgery do not necessarily require tests prior to receiving BFB. Total pelvic floor ultrasound shows much of the anatomy seen on proctography (although defaecatory dynamics are not examined during ultrasound) and performing both tests may be unnecessary. Also, it is not known if the telephone triage assessment can be used to predict which patients require investigation rather than blanket investigating all patients. This study examines the effect of the telephone triage assessment and each test on decision making in the MDM.

Study design, materials and methods

Two blinded clinicians (one consultant surgeon, one clinical fellow) reviewed 150 anonymised patients who had historically presented to the unit between October 2014 and April 2015 with pelvic floor defaecatory dysfunction.

The clinic letter alone was reviewed to decide a management plan (BFB or BFB with investigations with a view to a clinic appointment for discussion of surgery with a surgical consultant).

Cases were then reviewed with; 1) the clinic letter, ARP and proctogram 2) the clinic letter, ARP and ultrasound and 3) the clinic letter, proctogram and ultrasound.

During each review the following were answered;

- 1) What is your treatment plan? BFB, BFB with investigations if conservative measures fail or BFB with investigations and a clinic appointment to plan surgery.
- 2) If the plan is surgery, which operation would be recommended?
- 3) How certain are you of your plan? Likert scale 1 - 5

The decision made with all tests in the MDM and the actual treatment was recorded (6 months after initial assessment).

Results

Actual treatment was; 131 BFB and 19 BFB with surgery.

When reviewing the clinic letter alone, all who had surgery were correctly identified as requiring investigations but these would have occurred after a course of BFB. Six patients would have attended clinic and undergone full investigations unnecessarily when actual treatment was BFB alone. A further 33 patients would have been sent for tests but only if BFB treatment failed to treat their symptoms; those 19 whose actual treatment was surgery were all included within this group.

The accuracy of each combination of investigations when comparing intended treatment to actual treatment was as follows;

Investigations reviewed	Positive Predictive Value	Negative Predictive Value
Clinic letter, ARP, proctogram	34%	100%
Clinic letter, ARP ultrasound	38%	100%
Clinic letter, ultrasound, proctogram	41%	98%
All investigations (clinic letter, ARP, USS, proctogram) in the MDM	34%	98%

There was a significant rise in clinician confidence in decisions made with proctography compared to ultrasound ($p<0.00001$). Type of intended operation when examining the proctogram and ARP was different from the actual operation performed (Fishers' exact test $p = 0.04$). The type of intended operation when examining the ultrasound and ARP or the ultrasound and proctogram was not significantly different from the actual operation performed ($p=0.15$, $p=0.2$).

Interpretation of results

The telephone triage assessment letter can be used to correctly identify those patients who need investigations to plan surgical treatment. The majority of patients would be correctly identified for BFB and do not require specialist pelvic floor investigations. Other patients may only require investigations if BFB fails to resolve their symptoms.

Interestingly, the decision made regarding the type of intended surgery was more likely to be same as the actual surgery performed when reviewing total pelvic floor ultrasound than when reviewing defaecation proctography. However, given that ultrasound is a relatively new modality for defaecatory dysfunction clinician confidence is still higher with proctography.

Concluding message

The pelvic floor telephone triage assessment clinic can be used to correctly identify those patients' requiring specialist investigation before BFB and can direct most patients straight to BFB without the delay and inconvenience of pelvic floor investigations. When investigations are indicated it may not be necessary to perform both defaecation proctography and total pelvic floor ultrasound as decision making and surgical planning can be made with ultrasound alone.

Disclosures

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