Nottingham
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USE OF A SURGICAL ABDOMINAL ASSESSMENT TO OPTIMISE PERITONEAL DIALYSIS CATHETER INSERTION PATHWAYS

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INTRODUCTION

Peritoneal dialysis (PD) is cost-effective and generally well tolerated

Patients with complex or obese abdomens may be considered unsuitable for PD

Major reasons for early unplanned transfer to HD are catheter complications and mechanical complications

Timely surgical abdominal assessments can:
- Optimise planning for PD catheter insertion
- Identify potential contraindications
- Enable alternative access to be arranged if needed

A one-year review assessed the impact of surgical evaluations on PD access planning.

METHOD

- **Study period:** January 2021- December 2021
- **Participants:** All patients receiving surgical abdominal review
- **Data sources:**
  - Clinic letters
  - Discharge summaries
- **Follow-up duration**: 3-year outcome tracking



Image 1. Potential clinical findings on surgical abdominal review

RESULTS

- 82 patients underwent surgical abdominal assessment, with a median age of 64 years.

RESULTS CONTINUED

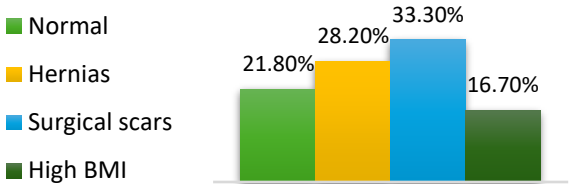


Figure 1. Abdominal characteristics on findings on surgical abdominal review

4 patients (4.9%) were unsuitable for PD) due to:
- Hernias 1 (25%)
- Abdominal surgeries 2 (50%)
- Large polycystic kidneys 1 (25%)

Of the 4 patients unsuitable for PD, 3 (75%) had definitive vascular access arranged prior to HD start

Median time from abdominal review to PD 11 months (±9).

Median time eGFR at assessment 12 ml/min/1.73m² (±3)

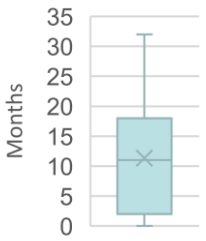


Figure 2. Time from abdominal review to PD catheter insertion (months)

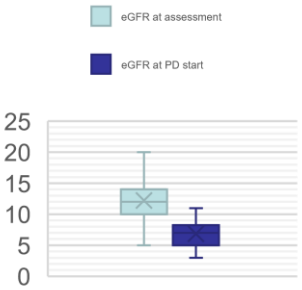
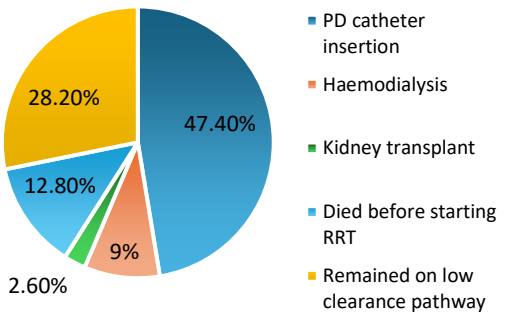


Figure 3. eGFR at abdominal assessment and at PD start



Reasons for starting HD instead of PD:
- Avoiding hernia repair
- Unplanned starts
- Personal preference

Figure 4. Patient outcomes at 3 year follow up

CONCLUSION

- Most patients had factors affecting PD catheter surgery based on surgical abdominal reviews
- Abdominal review outcomes influenced dialysis modality choice for some patients
- 47.4% of patients undergoing abdominal review had a PD catheter inserted within 3 years
- 80% of patients unsuitable for PD underwent vascular access surgery before starting renal replacement therapy (RRT)
- Some patients died or received a transplant before needing PD
- Early review offers clear planning benefits but must be balanced against efficient use of limited surgical clinic resources

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