

Peritoneoscopic peritoneal dialysis catheter insertion as a medical daycase procedure: Patient satisfaction and patient reported outcome measures

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Background

A nephrologist-led peritoneoscopic peritoneal dialysis catheter (PDC) insertion service has been established at the Leicester General Hospital unit since 2007. PDC are inserted under conscious sedation as a daycase procedure. Since commencement of the service 359 PDC have been inserted. There have been no instances of bowel perforation.

As previous studies have shown, complication rates are comparable to surgically inserted tubes, with primary PDC failure rates <10%, rates of peri-PDC leaks and exit site infections <5%, with some evidence suggesting peritoneoscopically inserted tubes survive longer than those inserted laparoscopically¹.

The advantages to peritoneoscopic over laparoscopic surgery are summarized below:

Laparoscopic surgery requires:

- General Anaesthesia
- Multiple port sites
- Bigger incisions
- Larger scopes
- Automated gas infusion

Peritoneoscopic surgery requires:

- Local anaesthesia + conscious sedation
- Single port
- Smaller incision
- Manual infusion ~ 1 litre CO₂

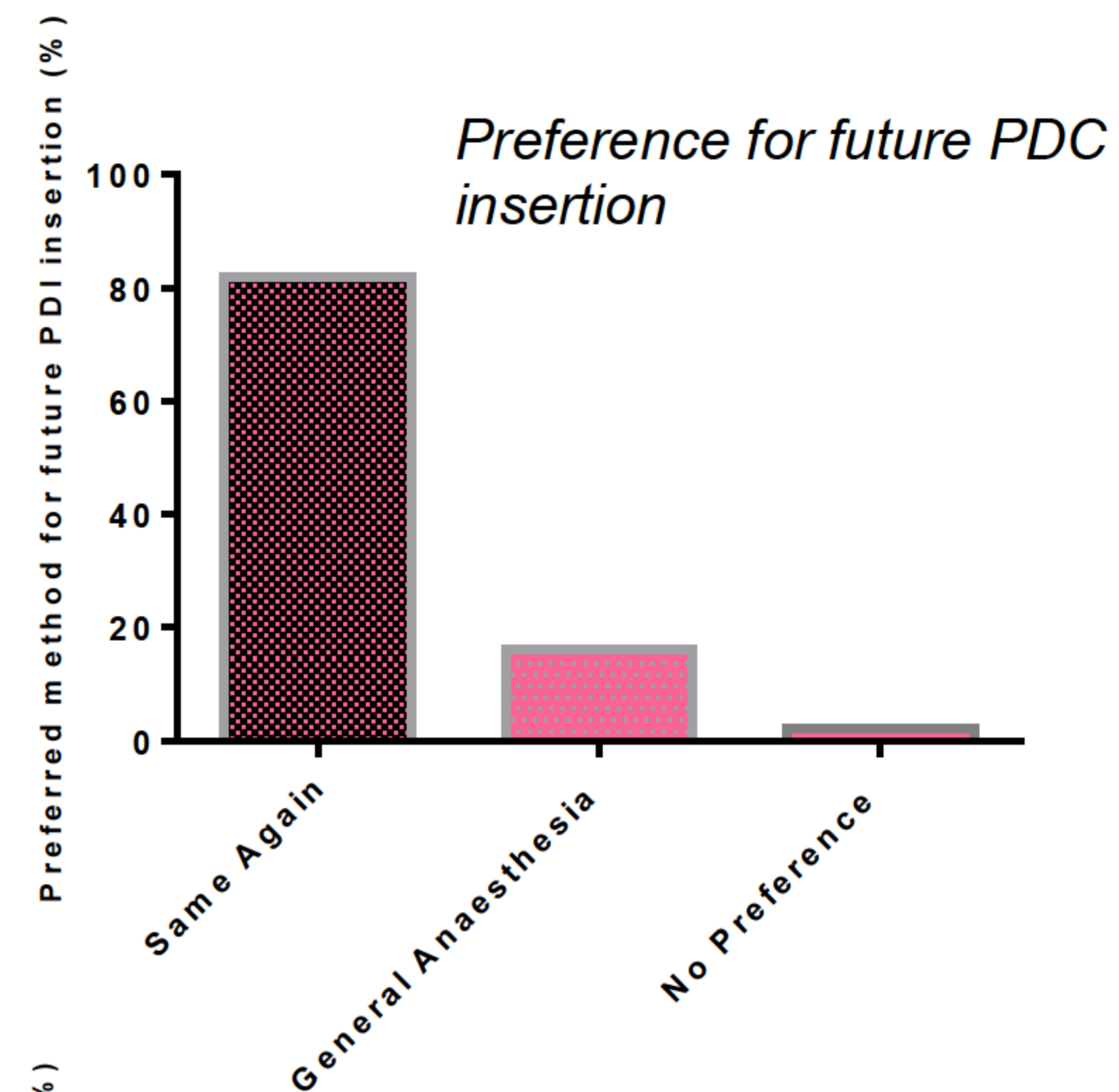
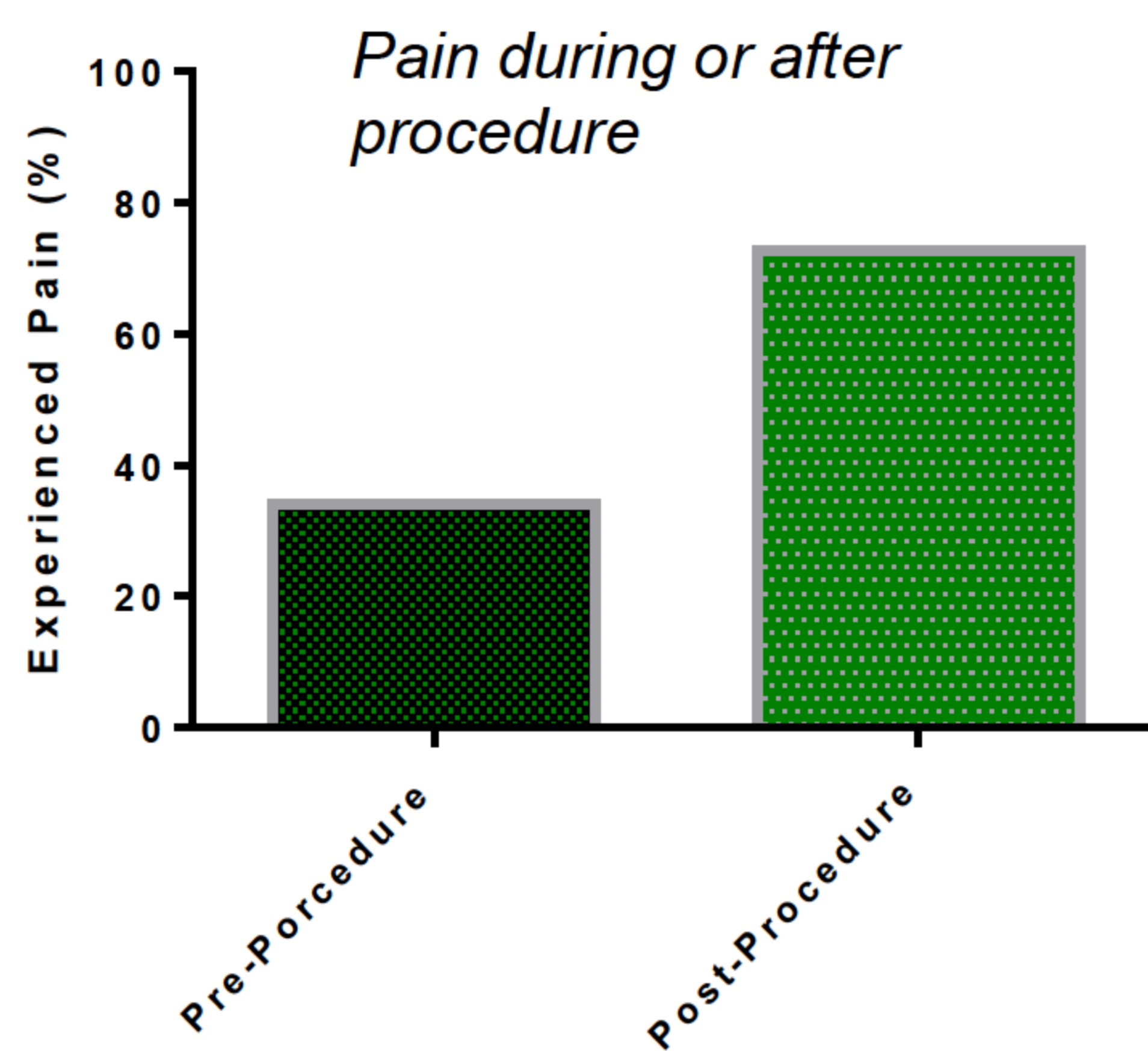
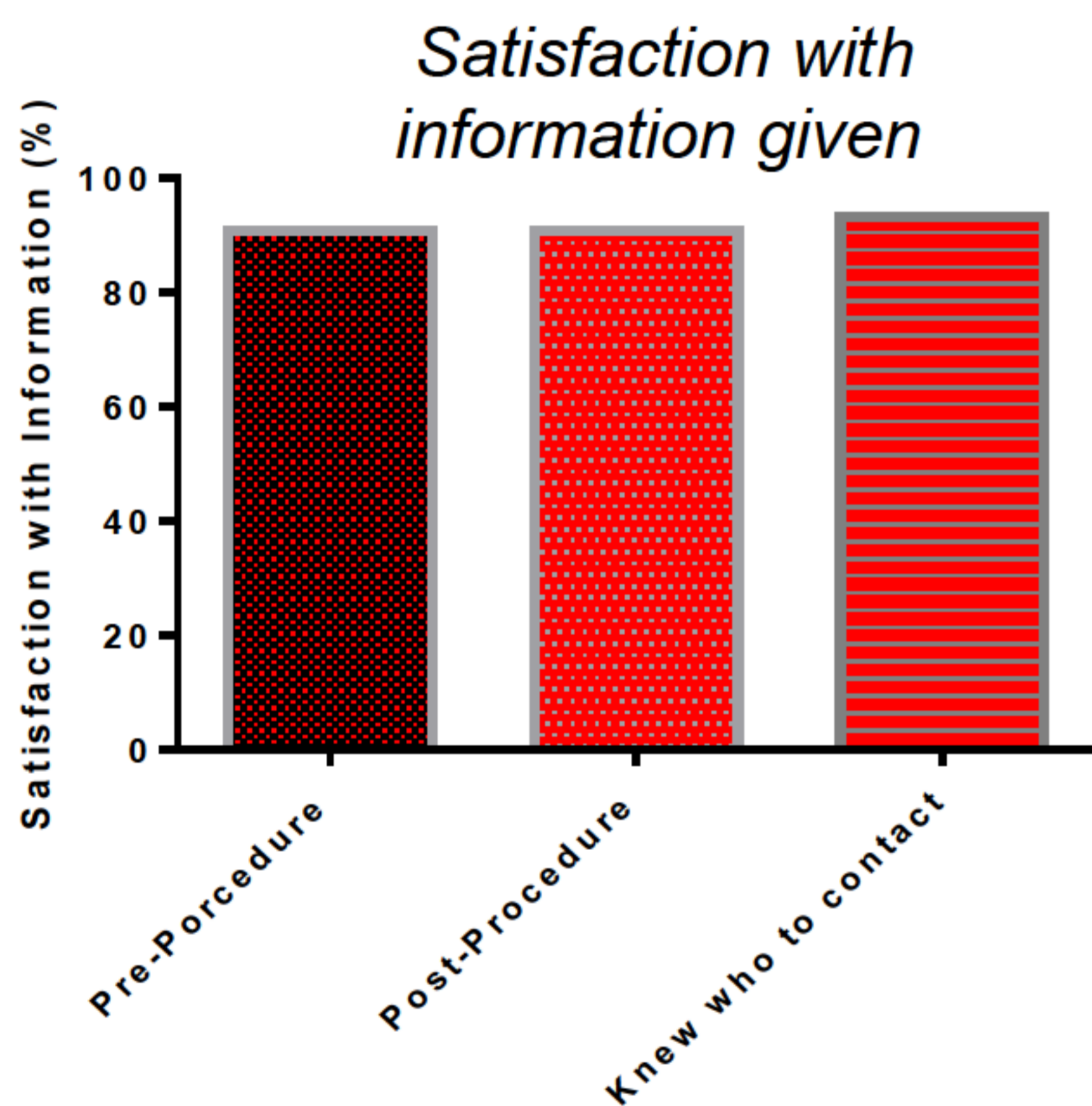
In this study we randomly surveyed 44 patients who underwent daycase PDC insertion over a 24 month period to review tolerability, acceptability and patient reported outcome scores.

Methods

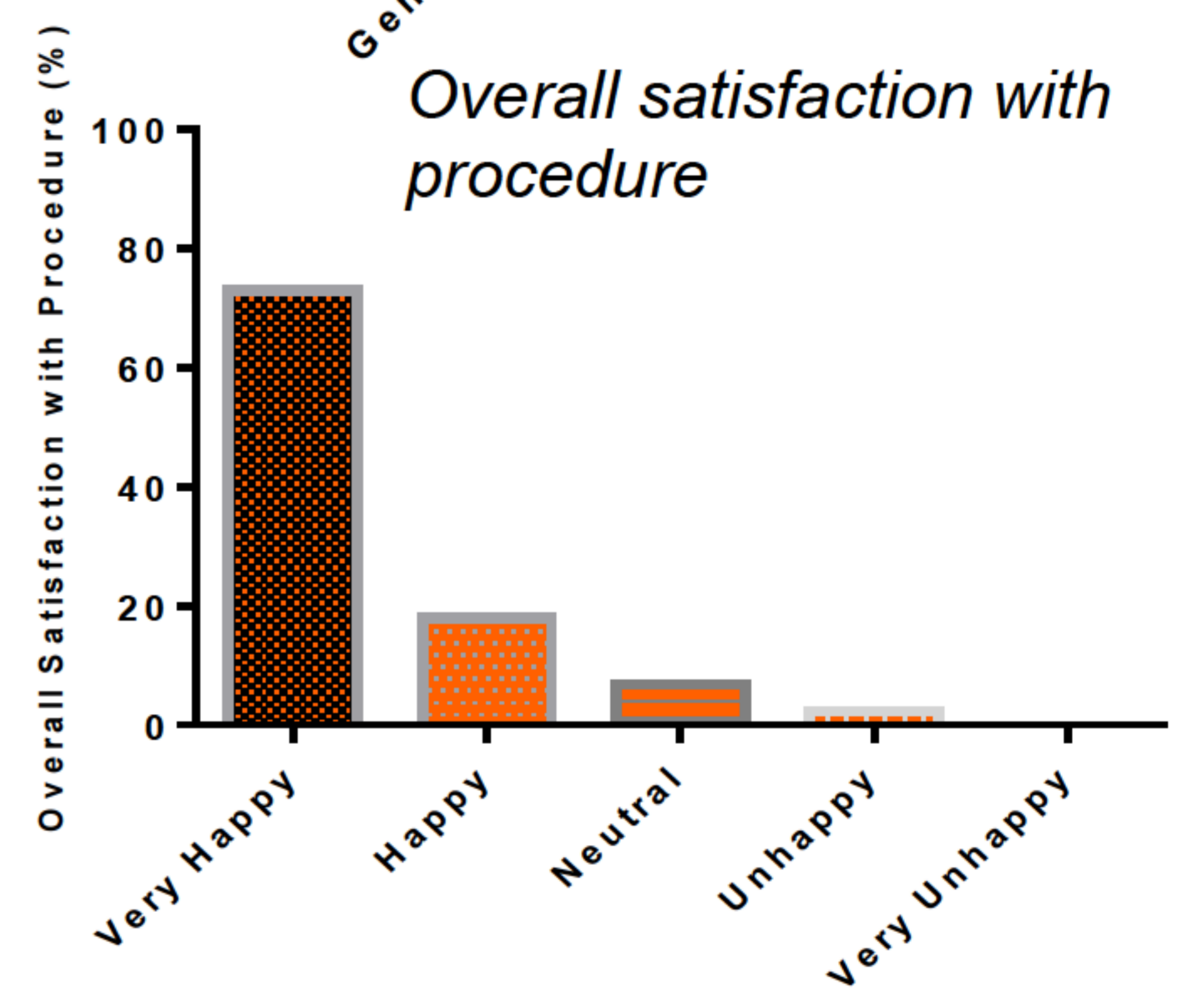
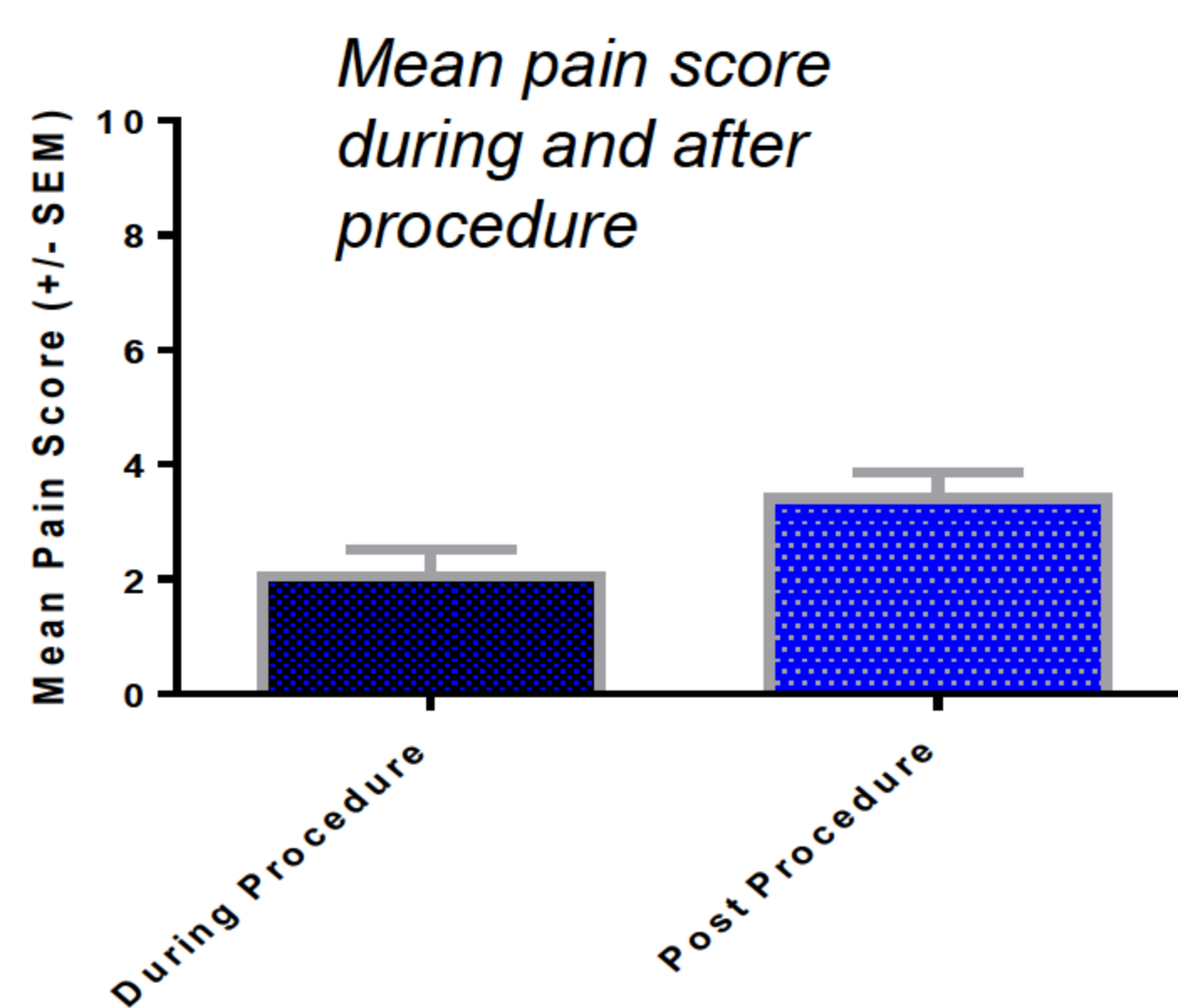
Patients were approached by the hospital daycase staff and 44 patients were randomly surveyed over a 24 month period prior to discharge following PDC insertion. The survey was anonymous and explored the patient experience, peri-procedural pain and nausea, the effectiveness of pre-and post procedure information and whether the whole process was tolerable, acceptable and aligned with their expectations.

Patients were also asked whether based on their experience they would recommend the procedure to a friend or whether they themselves would have the procedure in the same way again, or whether they would prefer to have a general anaesthetic if they required another PDC tube in the future.

Results



Additional Symptoms Reported	Number reporting
Nausea	1
Trapped Wind	1
Faintness	1
Unstable BP	1
Weakness	1
Difficulty Passing Urine	1



Conclusions

Peritoneoscopic daycase PDC insertion is well tolerated by patients and 98% of patients would be happy to recommend it to a friend. The technique avoids the risks associated with general anaesthesia and reduces overnight admissions. Complication rates from nephrologist-led PDC insertion are low¹, with comparable success rates in terms of PDC function when compared to surgical PDC insertion. We recommend that nephrologist-led PDC insertion should be considered where available for all patients requiring PDC insertion unless there are surgical or medical factors that require general anaesthetic and insertion in theatre. Guidelines are established to guide training requirements to establish this service².

References

1. Prospective comparison of peritoneoscopic and surgical implantation of CAPD catheters. Pastan S1, Gassensmith C, Manatunga AK et al. ASAIO Trans. 1991 Jul-Sep;37(3):M154-6.
2. Guidelines for training, certification, and accreditation in placement of permanent tunneled and cuffed peritoneal dialysis catheters. American Society of Diagnostic and Interventional Nephrology. Semin Dial. 2002 Nov-Dec;15(6):440-2.

