How I Do It Series NUMBER 4

Green Light Laser Prostatectomy Service

IAN SMITH, ANURAG GOLASH & CLARE HAMMOND

(Original article published 2013, updated 2020)

Patient Selection	• Benign prostatic hypertrophy or carcinoma of prostate • Small to moderate prostate (<40 g) • Contraindicated if known large middle lobe or raised PSA • Typically quite an elderly population with significant co-morbidities, but most will be acceptable provided spinal anaesthesia is not contraindicated
Anaesthetic Techniques	• Most patients are managed using a low dose spinal technique • We use 6–7 mg hyperbaric bupivacaine with 10 µg fentanyl added made up to 3 ml with saline • Patients listen to their choice of music. Sedation is rarely needed, propofol (10–20 mg) can be used for especially anxious patients. We only add oxygen if sedation is used • All patients get 240 mg of gentamicin and 1 litre of Hartmann's solution • General anaesthesia with spontaneous ventilation through a LMA is an acceptable alternative where spinal anaesthesia is not possible
Surgical Technique	• A standard laser prostatectomy technique with saline irrigation is used, this is not modified for day surgery • 16 French gauge 2 way catheter at the end of surgery (no irrigation) • We remove the catheter at 2–4 hours when the spinal has worn off if the urine is clear • If the urine is not clear or if trial without catheter (TWOC) fails, patients go home with a catheter for further TWOC at 2 days by district nurse
Peri-operative Analgesia	• Preoperative oral slow-release ibuprofen, 1600 mg • Postoperative regular paracetamol and codeine, if needed • With spinal anaesthesia, most patients have little postoperative pain
Organisational Issues	• Pre operative brief to include PACU staff member as anticipation of individual patient issues hugely valuable in this patient group • Day Surgical Unit theatre team experienced in major gynaecological laparoscopic cases with skills that enable conversion to open procedures – staff rotate to main theatres if unfamiliar with open cases. • Urinary catheter throughout procedure but removed in theatre prior to reversal of anaesthesia

Authors' Addresses

IAN SMITH Consultant Anaesthetist (now retired)
ANURAG GOLASH Consultant Urologist
CLARE HAMMOND Day Surgery Unit Manager (now retired)
University Hospital of North Staffordshire, Stoke-on-Trent.

Take Home Medication	• Slow release ibuprofen for 3 days • Co-amoxyclav for 3 days
Organisational Issues	• The surgical technique for laser prostatectomy is quite different to that for conventional TURP; whatever the level of surgical experience, this should be regarded as a new operation • It is difficult to test the low dose spinal block (cold sensation and motor function may be preserved), but onset is usually adequate after application of monitors, positioning and draping • The onset of pain during the procedure can signify an over-full bladder. Check drainage before giving supplemental analgesia (e.g., 20 µg fentanyl) or sedation • Patients who were not previously catheterised may need basic catheter care training if they fail the initial TWOC
Common Pitfalls	• Excessive talking (or laughing or singing!) by the patient can distort the surgical view • Take great care to minimise intraoperative bleeding, especially at the start of the procedure. Avoid excessive movements of the resectoscope • Postoperative dysuria is common, antibiotics probably do not prevent this but may deter the patient from troubling their GP!
Anticipated Day Case Rates	• 90%