

# National Day Surgery Delivery Pack

Appendices

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Day surgery hip replacement anaesthetic protocol

Day surgery hip replacement pathway

“How to Do It” series of Articles (reproduced with permission from the Journal of One-Day Surgery)

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- Day Case Green Light Laser Prostatectomy
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# Section 1

**Torbay Day Case Primary Hip Arthroplasty  
Patient Post Operative Self -Medication Chart**

Affix Patient Label

**Record of doses taken - Patient to tick each time dose taken**

*Discharging nurse to please write days of week in table below*

*Initial discharge chart – see next page for day 3 onwards.....*

<i>Day of week /dates:</i>					
		<b>Day of Operation</b>	<b>Day 1</b>	<b>Day 2</b>	<b>Notes:</b>
<b>08.00</b>	Paracetamol *	Any required doses of these will have been given to you during your time in hospital			
	Omeprazole				Only if on Ibuprofen
	Oxycodone				Stop medicine
	Macrogols				
	Pregabalin				
	Ondansetron				Stop medicine
	Aspirin				
<b>14.00</b>	Paracetamol *				
	Ondansetron				Stop medicine
<b>18.00</b>	Paracetamol *				
	Oxycodone				Stop medicine
	Macrogols				
	Pregabalin				
<b>22.00</b>	Paracetamol*				
	Ondansetron				Stop medicine

**Is the patient usually on tablets for high blood pressure ?**  
 Yes     No  
 If yes please complete additional sheet (p4)

**NOTES**  
 If you have also been prescribed **Ibuprofen** as part of your take home medication please take a dose each time you take the Paracetamol\* dose – up to a maximum of 4 times per day. You will also have been given a 5 day course of Omeprazole if we send you home with Ibuprofen. Please take this as indicated on the chart. If you have not been sent home with Ibuprofen by us you do not require the Omeprazole. Further notes on page 2..

**Torbay Day Case Primary Hip Arthroplasty  
Patient Post Operative Self-Medication Chart**

<i>Day of week / dates:</i>										
		<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>	<b>Day 6</b>	<b>Day 7</b>	<b>Day 8</b>	<b>Day 9</b>	<b>Day 10</b>	
<b>08.00</b>	Paracetamol *				Stop medicine if you can – if not then OK to continue as you need					
	Omeprazole				Stop medicine – unless you are on this normally					
	Codeine OR Tramadol				Stop medicine					
	Macrogols				Stop medicine					
	Pregabalin									Continue until Day 14
	Aspirin									Continue until Day 28
<b>14.00</b>	Paracetamol *				Stop medicine if you can – if not then OK to continue as you need					
	Codeine OR Tramadol				Stop medicine					
<b>18.00</b>	Paracetamol *				Stop medicine if you can – if not then OK to continue as you need					
	Codeine OR Tramadol				Stop medicine					
	Macrogols				Stop medicine					
	Pregabalin									Continue until Day 14
<b>22.00</b>	Paracetamol *				Stop medicine if you can – if not then OK to continue as you need					
	Codeine OR Tramadol				Stop medicine					

**NOTES... continued from page 1**

Your Oxycodone is prescribed for the first two days **only** – this medication can be very addictive and **must not** be continued longer than this period. Please do not approach your GP to ask for it to be continued – they have been asked by us not to reissue it. At Day 3 you should take the Codeine (or Tramadol) that you have been sent home with instead. Do not take the Codeine (or Tramadol) whilst you are still taking the Oxycodone

**Torbay Day Case Primary Hip Arthroplasty  
Patient Post Operative Medication INFORMATION**

<b>Drug Name</b>	<b>How many times a day do I take this ?</b>	<b>How many days do I take this for ?</b>	<b>What is it for ?</b>	<b>Additional Information</b>
<b>Paracetamol</b>	4	5 days	Pain relief	This is an excellent ‘foundation’ pain reliever which will improve the effect of your other pain medicines.
<b>Ibuprofen</b>	4	5 days	Pain relief	Some people can’t take Ibuprofen. Your anaesthetist will have made a decision if this is an appropriate medicine for you and <u>IF</u> appropriate you will have been discharged with it. If it has been provided take it each time you have your Paracetamol dose
<b>Omeprazole</b>	1	5 days	Stomach protection	If you have been sent home with Ibuprofen this medicine will help protect your stomach lining whilst you are on the Ibuprofen
<b>Oxycodone SR</b>	2	<b><u>First 2 days only</u></b>	VERY STRONG pain relief	This will be ‘stepped down’ after the first two days to a different pain medicine: either Codeine or Tramadol will have been prescribed for you. <b>IMPORTANT: DO NOT TAKE CODEINE OR TRAMADOL WHILST ON THIS MEDICINE.</b>
<b>Codeine Phosphate OR Tramadol</b>	4	<b>Days 3 – 5 only</b>	STRONG pain relief	<u>ONE</u> of these two will have been prescribed as your ‘step-down’ pain medicine when your very strong Oxycodone medicine ends. Your anaesthetist will have decided which one is the most appropriate for you. <b>IMPORTANT: DO NOT TAKE WITH OXYCODONE MEDICINE.</b>
<b>Pregabalin</b>	2	14 days	Pain relief – has direct nerve action	This pain medicine acts in different ways to other pain relief medicines and you should take it for 14 days after your operation, then it should be stopped.
<b>Ondansetron</b>	3	2 days	To reduce/ prevent nausea (‘feeling sick’)	You should only need this as a precaution whilst you are on the strong pain-reliever Oxycodone.
<b>Macrogols</b>	2	5 days	To reduce/ prevent constipation	Strong pain medicines will often cause constipation. We don’t want this to happen for you so we are sending you home with medicine to prevent this
<b>Aspirin 150mg</b>	1	28 days	To reduce risk of a blood clot (DVT)	We need you to take aspirin to reduce the chance of you getting a blood clot in the veins of the leg (DVT). If you are already on other ‘blood thinning’ drugs eg Warfarin or Clopidogrel your post op plan will be different and you will not be issued with this 28 day course of Aspirin.

**Required for patients who normally take tablets for High Blood Pressure**

After your operation your blood pressure can sometimes be lower than normal – this is quite common.

If you are normally taking medicines for high blood pressure then we need to review what is happening with your blood pressure after the operation before these tablets are re-started to make sure it is safe.

Please do **NOT** take the following medication in the days after your operation until advised to restart\*:

.....  
.....  
.....

Your outreach nurse will review these and your blood pressure when they see you and will tell you when you can re-start your medicines.

Please show them this sheet when they come and visit you.

Please take all your other medicines as normal unless explicitly told not to by one of the doctors or nurses looking after you.

\* Instructions for discharging nurse:

Please review patients 'blue top' preassessment PICIS – details in addenda will have been left by a pre-op anaesthetist stating what medications need to be held post op for this patient.

Please copy these instructions onto this paper for the patient to take home with them.

The outreach nurse/GP will restart when appropriate post op. Dr Hinde can be approached to assist with any medication related queries in this regard

Beta blockers should not be stopped nor should drugs which are for arrhythmias but medication for high blood pressure eg ACE inhibitors (Ramipril etc) should be held.

## Day Surgery Unit - Perioperative Prescription Chart

Patient Name
Hospital Number
Date of Birth

Drug Allergies
----------------

Preoperative Medication		
		Time given
Paracetamol	Yes/No	
Ibuprofen	Yes/No	

Drug	Dose	Route	Frequency	Time	Signature	Time	Signature
Paracetamol	1g	po/iv	4 hourly				
Ibuprofen	600mg	po	4-6 hourly				
Morphine Sulphate (Oramorph)	10mg	po	2 hourly				
Morphine Sulphate (Oramorph)	20mg	po	2 hourly				
Metoclopramide	10mg	po/iv	8 hourly				
Ondansetron	4mg	iv	8 hourly				
Cyclizine	50mg	iv	8 hourly				
fentanyl	25mcg	iv	1st Dose				
<i>(max 6 doses then review)</i>			2nd Dose				
			3rd Dose				
			4th Dose				
			5th Dose				
			6th Dose				
Others (list below)							
Hartmanns	500mls	iv					

I authorise all the above post operative medications according to unit protocols

**Doctors Signature**

**Date**



## Day Surgery Unit- Paediatric Perioperative Prescription Chart

Patient name
Hospital number
Date of birth

Drug Allergies
----------------

Preoperative Medications		Time
Paracetamol	Y/N	
Ibuprofen	Y/N	

**WEIGHT** \_\_\_\_\_ **Kg**

Drug	Dose	Route	Frequency	Time	Signature	Time	Signature
<b>Paracetamol</b> 15mg/kg		po/iv	4-6 hourly				
<b>Ibuprofen</b> 5mg/kg		po	4-6 hourly				
<b>Oramorph 1-2 yr</b> 0.2-0.4 mg/kg		po	4 hourly				
<b>Oramorph 2-12 yr</b> 0.2-0.5 mg/kg (Max dose 15mg)		po	4 hourly				
<b>Oramorph 12-15 yr</b> 5-15mg		po	4 hourly				
<b>Oramorph 16-18 yr</b> 10-20mg		po	2-4 hourly				
<b>Ondansetron</b> 0.1mg/kg (Max 4mg)		po	8 hourly				
<b>Fentanyl</b> 0.3mcg/kg		iv	1 <sup>st</sup> Dose				
		iv	2 <sup>nd</sup> Dose				
<b>Others</b> (list below)							

I authorise all the above post operative medications according to unit protocols

**Doctors signature**

**Date**

## ACUTE PAIN PROTOCOL FOR ADULT SURGERY

	<b>Pain Intensity</b>	<b>Discharge Medication</b>			<b>Doctors Signature</b> (sign one box only)
A	None	None			
B	Mild	Paracetamol	1g	QDS	
C	Moderate	Paracetamol	1g Plus	QDS	
		Ibuprofen	600mg	QDS	
C*	Moderate (NSAID intolerant)	Paracetamol 500mg/Codeine 30mg i-ii			QDS
		Laxido	1 Sachet	BD	
D	Severe	Paracetamol 500mg/Codeine 30mg i-ii			QDS
		Plus			
		Ibuprofen	600mg	QDS	
		Plus			
		Laxido	1 Sachet	BD	
D*	Severe (NSAID intolerant)	Paracetamol	1g	QDS	
		Oromorph	20mg	QDS	

## PAIN CATAGORIES FOR COMMON PROCEDURES IN THE DAY SURGERY UNIT

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
EUA Ears Cystoscopy Restorative Dentistry	Cataract Surgery Grommets or T tube removal/insertion Prostate Biopsy Sebaceous Cyst Surgery Sigmoidoscopy Skin Lesion Surgery Urethral Surgery	Anal Surgery Apicectomy Arthroscopy Axillary Clearance Breast Lumps Dupuytren's contracture Carpal Tunnel Decompression Cervical/vulval Surgery Hysteroscopy/D&C Middle Ear Surgery MUA +/- Steroid Injection Vaginal Sling Varicose Vein Surgery Vasectomy Non-Wisdom Tooth Extraction	ACL Reconstruction Circumcision Endometrial Ablation Laparoscopy Haemorrhoidectomy Hernia Repair Joint Fusions & Osteotomies Shoulder Surgery Squint Surgery Testicular Surgery Tonsillectomy Wisdom Tooth Extraction Dental Clearance

*Day Surgery Unit  
Torbay Hospital  
Loves Bridge  
Torquay  
TQ2 7AA  
Tel: (01803) 655508  
Date: 02/09/2019*

**DAY SURGERY CARE PLANNING SUMMARY**

**Hospital Number:**

**Patient Name/DOB/Address:**

**Date of Admission:**

**Consultant:**

**Operating Surgeon: Sub speciality:**

***Operation Details:***

**Operation Performed:**

**Operation Date:**

**Medication Information:**

**Sutures out:**

**Follow-Up Outpatient appointment required:**

**Dressing/Wound check:**

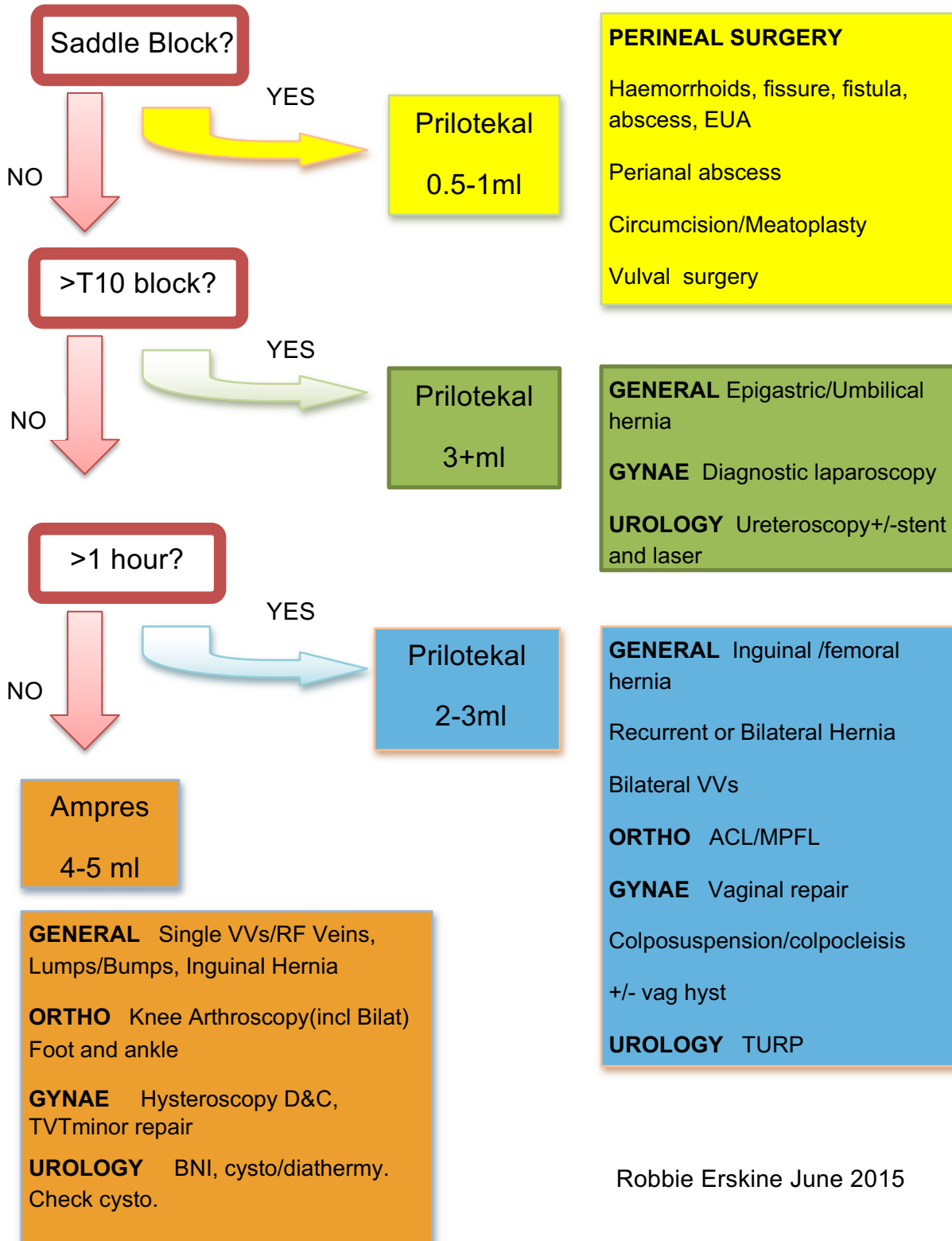
**Additional discharge information:**

Between the hours of 8am – 8pm (Monday – Friday) expert advice should be sought from the Day surgery Unit on 01803 654055

If urgent advice is required overnight, your patient and carer have been told that they may contact the hospital switchboard on 01803 614567 and ask for the surgical nurse bleep holder, (bleep 110), for help. The call will be dealt with by an experienced nurse who will seek medical advice if this is judged to be necessary.

A nurse from the Unit will telephone you tomorrow to confirm that all is well. **Further expert advice should be obtained from your GP if required.**

# Procedure Targeted Spinal Anaesthesia Prilotekal or Ampres



Robbie Erskine June 2015



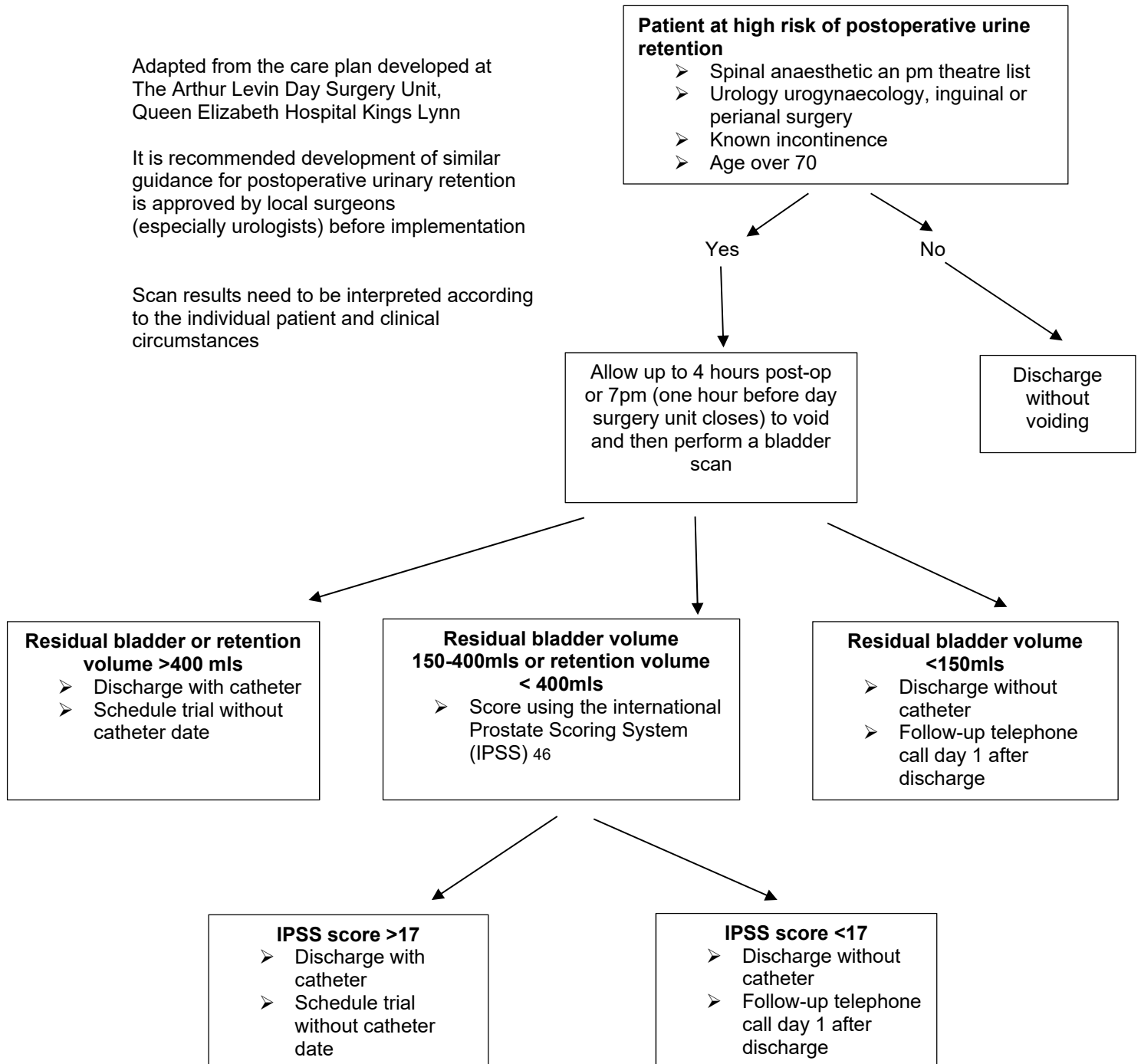
# Bladder Management Flowchart

Copyright: British Association of Day Surgery, reproduced with permission

Adapted from the care plan developed at The Arthur Levin Day Surgery Unit, Queen Elizabeth Hospital Kings Lynn

It is recommended development of similar guidance for postoperative urinary retention is approved by local surgeons (especially urologists) before implementation

Scan results need to be interpreted according to the individual patient and clinical circumstances



## Flow chart for arranging overnight care in the community

Patient identified as having no overnight care at pre assessment or on the day of surgery.

Patient is prepared to have a sitter overnight in their home

Yes

No

Patient fits criteria:

Suitable accommodation (More than one room)

No mental health issues or history of substance abuse.

Yes

No

Patient has date for surgery

Yes

No

Contact Discharge Co-ordinators to liaise with Rapid Response who will organise the sitter  
This will either be a member of staff employed by the trust or an HCA from Nurse Plus (Agency)

Ask patient to contact DSU when dated



## Section 2





Pre-Op	Carbohydrate drink 2hrs pre op. <b>Patient should be 1<sup>st</sup> on theatre list.</b>
	Withhold ACEi/A2RB medication on day before AND day of surgery
	Ensure patients are not cold – prewarm
	<b>Pre-meds:</b> <ul style="list-style-type: none"> <li>• Paracetamol 1g</li> <li>• Ibuprofen 1600mg SR if no contraindication</li> <li>• <b>Oxycodone MR 10mg</b> (*5mg if age &gt;70)</li> </ul>

Intra-Op	<table border="1" style="width: 100%;"> <thead> <tr> <th style="background-color: #0070C0; color: white;">HIP</th> <th style="background-color: #0070C0; color: white;">KNEE</th> </tr> </thead> <tbody> <tr> <td> <input checked="" type="checkbox"/> Spinal +  <input checked="" type="checkbox"/> Surgical Infiltration                 </td> <td> <input checked="" type="checkbox"/> Spinal +  <input checked="" type="checkbox"/> Saphenous block (US guided) +  <input checked="" type="checkbox"/> Surgical Local Infiltration                 </td> </tr> </tbody> </table>	HIP	KNEE	<input checked="" type="checkbox"/> Spinal + <input checked="" type="checkbox"/> Surgical Infiltration	<input checked="" type="checkbox"/> Spinal + <input checked="" type="checkbox"/> Saphenous block (US guided) + <input checked="" type="checkbox"/> Surgical Local Infiltration
	HIP	KNEE			
	<input checked="" type="checkbox"/> Spinal + <input checked="" type="checkbox"/> Surgical Infiltration	<input checked="" type="checkbox"/> Spinal + <input checked="" type="checkbox"/> Saphenous block (US guided) + <input checked="" type="checkbox"/> Surgical Local Infiltration			
	<b>Spinal:</b> <ul style="list-style-type: none"> <li>• 3 - 3.4mls hyperbaric 2% Prilocaine– (Day cases)</li> <li>• <i>NO INTRATHECAL OPIOID</i></li> <li>• +/- small boluses of IV fentanyl during skin closure if needed.</li> </ul>	<p>Insertion → <b>SUPINE</b> → Then &lt;30° head up <b>2 mins</b></p>			
	<b>Local Anaesthesia</b> <ul style="list-style-type: none"> <li>• HIPS: Surgical infiltration 0.25% levobupivacaine 50mls (40mls if &lt;60kg)</li> <li>• KNEES: Ultrasound guided saphenous block + Surgical infiltration (ensure maximal LA dose not exceeded with combined technique)</li> </ul>				
<b>Antiemetics:</b> <ul style="list-style-type: none"> <li>• Dexamethasone 6.6mg IV at start</li> <li>• Ondansetron 4mg IV towards end</li> </ul>	<p><b>BOTH ARE NEEDED – PONV a significant issue</b></p>				
<b>Other:</b> <ul style="list-style-type: none"> <li>• Goal: <b>Minimise sedation</b> (if req – low dose TCI propofol)</li> <li>• Goal: <b>Normothermia</b> – proactively warm patient</li> <li>• Goal: <b>Normovolaemia</b> – warmed IV fluids 1000-2000mls</li> <li>• Goal: <b>Blood conservation</b> – Tranexamic Acid <b>1g IV at start of case + further 1g IV dose at end of case</b> + use of <b>Cell Salvage ROUTINELY</b> collection                             <ul style="list-style-type: none"> <li>▪ NB: Tranexamic acid use 10mg/kg if eGFR &lt;50 and/ or weight &lt;50kg</li> </ul> </li> <li>• Antibiotic administration &amp; appropriate mechanical thromboprophylaxis</li> </ul>					

Post Op	<b>Recovery:</b> <ul style="list-style-type: none"> <li>• Additional antiemetic if needed</li> <li>• Oral fluids to commence</li> <li>• Build up/ Fortisip drink (unless diabetic) – please prescribe for PACU</li> <li>• Fragmin 5000units sc pre discharge</li> </ul>	If not PU'd then pt needs catheterising pre discharge- please inform Ortho Outreach <b>Tel: 01803 654718</b>
	<b>TTAs:</b> <ul style="list-style-type: none"> <li>• Paracetamol 1g po qds 5/7</li> <li>• Ibuprofen 400mg-600mg po qds 5/7 (if no contraindication) + PPI cover (Omeprazole 20mg)</li> <li>• Oxycodone MR 10mg po bd for <b>4 post op doses</b> (*5mg if age &gt;70) <b>with reinforced non continuation of this via discharge summary (automated process)</b></li> <li>• <u>THEN step down to:</u> Codeine 30-60mg po qds OR Tramadol 50-100mg qds if codeine intolerant for 3/7.</li> <li>• Ondansetron 4mg po tds for 2/7</li> <li>• Macrogols 1 sachet po bd 5/7</li> <li>• Aspirin 150mg po od 28/7 - unless other anticoag plan in place eg warfarin/clopidogrel</li> </ul>	

### Torbay Day Case Primary Hip Arthroplasty Pathway

<b>PATIENT IDENTIFICATION</b>	<ul style="list-style-type: none"> <li>• Patient listed for simple primary total hip replacement via MSK pathway</li> <li>• Opportunities for identification as day case candidate: preassessment, consent clinic</li> <li>• Patient attends joint school, day case may be mentioned</li> <li>• Identify anaesthetist for list and inform them of day case</li> </ul>
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<b>PREOPERATIVE</b>	<ul style="list-style-type: none"> <li>• Straightforward surgery expected</li> <li>• Age &lt;70</li> <li>• BMI &lt;30</li> <li>• ASA 1 or 2</li> <li>• No complex pain issues, must not be on opioids already</li> <li>• No respiratory or unstable cardiac disease</li> <li>• Motivated with robust home set up, meets standard day case criteria</li> <li>• Screen for nocturia/prostatic symptoms (not prohibitive but inform team)</li> </ul>
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<b>INTRAOPERATIVE</b>	<ul style="list-style-type: none"> <li>• First patient on the list</li> <li>• Enhanced recovery: carbohydrate drinks, free clear fluids until sent for, keep warm</li> <li>• Premedicate with pregabalin, oxycodone SR, paracetamol and ibuprofen</li> <li>• Prilocaine spinal, minimal sedation</li> <li>• Antibiotics, tranexamic acid, balanced fluids, aim 1000ml but consider blood loss</li> <li>• Surgeon to infiltrate skin during cementing and infiltrate joint with LA</li> <li>• Complete day case PACU meds and TTOs to include controlled drug prescription for oxycodone, dalteparin to be given at 1400</li> </ul>
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**Torbay Day Case Primary Hip Arthroplasty Pathway**

<b>PRIMARY RECOVERY</b>	<ul style="list-style-type: none"> <li>• Alert DSU that patient is in primary recovery</li> <li>• Preliminary observations and discharge to secondary recovery after standard criteria are met</li> </ul>
<b>SECONDARY RECOVERY</b>	<ul style="list-style-type: none"> <li>• Ensure observations stable and BP within 20% baseline for <math>\geq 1</math> hour</li> <li>• Offer food and drink</li> <li>• Monitor degree of motor block, aim to mobilise (call Physiotherapy) when block fully worn off, pain score 0-1, blood pressure stable</li> <li>• Mobilise with physiotherapy, stand, walk and do stairs ideally in two visits.</li> <li>• Xray AP pelvis at a convenient time for unit</li> <li>• Ensure able to pass urine</li> <li>• Load with analgesia as prescribed, dalteparin at 1400</li> </ul>
<b>DISCHARGE</b>	<p>Nurse-led discharge after:</p> <ul style="list-style-type: none"> <li>• Confirmed eating and drinking with no nausea or vomiting (or an acceptable level for patient)</li> <li>• Loaded with oral analgesia</li> <li>• Passed urine</li> <li>• Xray reviewed.</li> <li>• Outreach informed of discharge, written information on analgesia, phone numbers for SOS.</li> </ul>

# How I Do It Series NUMBER 1

## Day Case Laparoscopic Nephrectomy

IAN SMITH, ANURAG GOLASH & CLARE HAMMOND

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• Non-functioning kidney or renal cell carcinoma</li> <li>• T1 tumour &lt;7 cm</li> <li>• Typical day surgery criteria, of which a well motivated patient is by far the most important</li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• We use a standardised protocol which is similar to that used for laparoscopic cholecystectomy</li> <li>• Induction with fentanyl and propofol. Tracheal intubation and controlled ventilation breathing sevoflurane in air-oxygen</li> <li>• Long acting intraoperative opioids are avoided</li> <li>• Multimodal antiemesis with dexamethasone and ondansetron</li> <li>• Intravenous hydration with 1 or (maximum) of 2 litres Hartmann's solution</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• Standardised transperitoneal laparoscopic approach with patient in lateral recumbent position</li> <li>• Staples or locking clips to renal pedicle</li> <li>• Infiltration of trocar ports and extraction site with 30 ml of 0.5% levo-bupivacaine</li> <li>• No urinary catheter or routine drains</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• Preoperative oral slow-release ibuprofen, 1600 mg</li> <li>• Intraoperative iv paracetamol near end of case</li> <li>• Fentanyl 2mcg/kg towards the end of the case</li> <li>• Postoperative regular paracetamol and codeine, if needed</li> <li>• Rescue intravenous fentanyl, if required</li> </ul>
<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• Slow release ibuprofen, paracetamol and codeine for 5 days</li> <li>• Buccal antiemetics if PONV problematic while in hospital</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• Surgeon must be experienced in laparoscopic perirenal procedures with a low rate of complications</li> <li>• District nurse follow-up after discharge (at least during early phase of learning curve)</li> <li>• Written information listing warning signs of serious postoperative complications and patients encouraged to self-refer to the surgical assessment unit if these signs are present</li> <li>• As with cholecystectomy, immediate postoperative outcome is difficult to predict, so increasingly a default to day case booking strategy is adopted</li> </ul>

#### Authors' Addresses

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

<b>Common Pitfalls</b>	<ul style="list-style-type: none"><li>• Wound drains are not a substitute for careful haemostasis</li><li>• We do not routinely measure urine output or renal function as small, asymptomatic changes do not alter management</li></ul>
<b>Anticipated Day Case Rates</b>	<ul style="list-style-type: none"><li>• 15–20% (for both benign and malignant)</li></ul>

# How I Do It Series NUMBER 2

## Day Case Laparoscopic Hysterectomy

NUALA CAMPBELL & JONATHAN HINDLEY

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>Any woman listed for laparoscopic hysterectomy who fulfills DSU criteria and <b>desires</b> day surgery pathway – patient led</li> <li>We have tended to avoid women with chronic pain either incidental to or being treated with hysterectomy as we feel that their postoperative pain management is more complex. This is a pragmatic rather than evidence based criterion and is flexible on discussion with patient.</li> <li>We have avoided women with large (greater than 14 week equivalent) uteri or other pathology that we feel increase the likelihood of conversion to laparotomy</li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>Induction and maintenance with target controlled propofol and remifentanyl infusions.</li> <li>Intubation and controlled ventilation using Pressure Controlled Ventilation- Volume Guaranteed and 5 mmHg of PEEP – this procedure requires very steep trendelenberg, and this mode keeps barotrauma to a minimum whilst reducing atelectasis.</li> <li>Large suction beanbag behind shoulders to prevent patient slipping when tipped.</li> <li>Minimum 3 metre infusion line for TIVA and a tap and extension on the fluid line: arms are tucked to the side and inaccessible during the case.</li> <li>Always give 1 litre crystalloid as this reduces PONV and dizziness: usually do not need more than this.</li> <li>IV Dexamethasone 4mg, cyclizine 50mg. Give the cyclizine just before pneumoperitoneum as the tachycardia side effect is useful at this stage!</li> <li>Subcutaneous fragmin 5000u at end of procedure</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>Standard Total Laparoscopic Hysterectomy with or without removal of ovaries</li> <li>Verres entry with high CO<sub>2</sub> pressures then operating at 12 to 15mmHg. Three or four port laparoscopy</li> <li>RUMI manipulator with balloon colpo-pneumo-occluder and KOH cups to manipulate uterus and maintain pneumoperitoneum (Have previously used McCartney tubes)</li> <li>Pedicles secured with bipolar diathermy throughout (reusable instruments)</li> <li>Vault sutured laparoscopically – needle introduced through 11mm port</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>Pre medication with oral Ibuprofen Retard 1600mg and Paracetamol 1G</li> <li>Intra operative: IV fentanyl 2 mcg/kg.</li> <li>Post operative IV fentanyl, then oramorph and regular paracetamol.</li> </ul>

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<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>Paracetamol 500 mg/ codeine 30mg po qds, laxido 1 sachet bd, plus ibuprofen 400 mg po qds</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>Pre operative brief to include PACU staff member as anticipation of individual patient issues hugely valuable in this patient group</li> <li>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.</li> <li>Urinary catheter throughout procedure but removed in theatre prior to reversal of anaesthesia</li> </ul>
<b>Common Pitfalls</b>	<ul style="list-style-type: none"> <li>Fluid redistribution from positioning: warn patient beforehand of periorbital/ facial swelling</li> </ul>
<b>Anticipated Day Case Rates</b>	<ul style="list-style-type: none"> <li>75%</li> </ul>

# How I Do It Series NUMBER 3

## Day Case Tonsillectomy

JANE MONTGOMERY & SHYAM SINGHAM

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• Age 3 and over</li> <li>• Caution in patients with severe sleep apnoea</li> <li>• Within 30 mins drive of hospital</li> <li>• Transport in own car</li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• EMLA or Ametop cream</li> <li>• Propofol 4mg/kg</li> <li>• Disposable reinforced LMA (a size down from what you would otherwise use) size 2 if &lt;20kg</li> <li>• Maintenance with isoflurane or sevoflurane in air and oxygen</li> <li>• Spontaneous respiration</li> <li>• Dexamethasone 0.25mg/kg</li> <li>• Ondansetron 0.1mg/kg</li> <li>• Crystalloids 10ml/kg</li> <li>• In recovery free fluids and food on demand</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• Coblation surgical technique to reduce PONV with decreased per-operative bleeding</li> <li>• 5% lignocaine with phenylephrine spray to tonsillar beds at the end of surgery</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• Preoperative ibuprofen 5mg/kg</li> <li>• Preoperative paracetamol 15-20 mg/kg</li> <li>• IV Fentanyl 1-2mcg/kg intraoperatively</li> </ul>
<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• Azithromycin 10mg/kg for 3 days od</li> <li>• Ibuprofen 5-10mg/kg for 1 week qds</li> <li>• Paracetamol 15mg/kg qds for 1 week qds</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• Nursing observations for 6hrs postoperatively</li> <li>• Nurse led discharge 6hrs postoperatively so need to be on morning list</li> <li>• Surgeon needs to be contactable in the afternoon if there are any concerns</li> </ul>

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<p><b>Common Pitfalls</b></p>	<ul style="list-style-type: none"> <li>• Site rLMA in anaesthetic room and do not tape to mouth. Check airway patent with head in extension to mimic surgical position</li> <li>• Ensure surgeon uses relatively large Doughty blade to avoid compression of rLMA on posterior third of tongue base</li> <li>• When gag is put in, if the surgeon can see rLMA cuff it's not far enough in</li> <li>• Insertion of gag initially can induce apnoea momentarily—check airway patent with brief bagging</li> <li>• If still a problem release gag and put a little tension on the rLMA as it is replaced (may stop rLMA folding on itself). Sometimes the obstruction is relieved when the surgeon places the Draffin rods</li> <li>• If still a problem revert to RAE endotracheal tube</li> </ul>
<p><b>Anticipated Day Case Rates</b></p>	<ul style="list-style-type: none"> <li>• 95%</li> </ul>

# How I Do It Series NUMBER 4

## Green Light Laser Prostatectomy Service

IAN SMITH, ANURAG GOLASH & CLARE HAMMOND

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• Benign prostatic hypertrophy or carcinoma of prostate</li> <li>• Small to moderate prostate (&lt;40 g)</li> <li>• Contraindicated if known large middle lobe or raised PSA</li> <li>• Typically quite an elderly population with significant co-morbidities, but most will be acceptable provided spinal anaesthesia is not contraindicated</li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• Most patients are managed using a low dose spinal technique</li> <li>• We use 6–7 mg hyperbaric bupivacaine with 10 µg fentanyl added made up to 3 ml with saline</li> <li>• 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</li> <li>• All patients get 240 mg of gentamicin and 1 litre of Hartmann's solution</li> <li>• General anaesthesia with spontaneous ventilation through a LMA is an acceptable alternative where spinal anaesthesia is not possible</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• A standard laser prostatectomy technique with saline irrigation is used, this is not modified for day surgery</li> <li>• 16 French gauge 2 way catheter at the end of surgery (no irrigation)</li> <li>• We remove the catheter at 2–4 hours when the spinal has worn off if the urine is clear</li> <li>• 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</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• Preoperative oral slow-release ibuprofen, 1600 mg</li> <li>• Postoperative regular paracetamol and codeine, if needed</li> <li>• With spinal anaesthesia, most patients have little postoperative pain</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• Pre operative brief to include PACU staff member as anticipation of individual patient issues hugely valuable in this patient group</li> <li>• 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.</li> <li>• Urinary catheter throughout procedure but removed in theatre prior to reversal of anaesthesia</li> </ul>

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<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• Slow release ibuprofen for 3 days</li> <li>• Co-amoxycylav for 3 days</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> <li>• 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</li> <li>• Patients who were not previously catheterised may need basic catheter care training if they fail the initial TWOC</li> </ul>
<b>Common Pitfalls</b>	<ul style="list-style-type: none"> <li>• Excessive talking (or laughing or singing!) by the patient can distort the surgical view</li> <li>• Take great care to minimise intraoperative bleeding, especially at the start of the procedure. Avoid excessive movements of the resectoscope</li> <li>• Postoperative dysuria is common, antibiotics probably do not prevent this but may deter the patient from troubling their GP!</li> </ul>
<b>Anticipated Day Case Rates</b>	<ul style="list-style-type: none"> <li>• 90%</li> </ul>

# How I Do It Series NUMBER 5

## Day Case Anterior Cruciate Ligament Reconstruction

MICHAEL HOCKINGS & MARY STOCKER

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• <b>No specific selection criteria</b></li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• <b>Short acting general anaesthetic:</b> We use TIVA with propofol and remifentanyl</li> <li>• <b>Saphenous nerve block which provides a slightly less reliable sensory block than a femoral nerve block but has the advantage of no motor block. This is the preferred technique surgically to enable full weight bearing immediately post operatively</b> 30 mls. 0.25% Bupivacaine (reduced to 1mg/kg if under 75kg)</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• <b>Infiltration of local anaesthetic into the skin around the harvest site of patellar tendon or hamstrings and the arthroscopic portals</b> 30mls of 0.25% Bupivacaine total (reduced to 1mg/ kg if under 75kg)</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• <b>Pre-operative: oral paracetamol and ibuprofen</b></li> <li>• <b>Intra-operative: iv fentanyl</b></li> <li>• <b>Post operative: regular paracetamol and ibuprofen</b></li> <li>• <b>Rescue intravenous fentanyl or oral morphine if required</b></li> </ul>
<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• <b>Paracetamol 500 mg/ codeine 30mg po qds, laxido 1 sachet bd, plus ibuprofen 600 mg po qds</b></li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• <b>Surgeon must write x- ray request form before patient leaves theatre</b></li> <li>• <b>Intravenous teicoplanin 400 mg on induction avoids the need for further post operative doses of antibiotics</b></li> <li>• <b>Physiotherapist must be available to see patient preoperatively or immediately post operatively to fit knee brace and aid timely discharge</b></li> </ul>
<b>Anticipated Day Case Rates</b>	<ul style="list-style-type: none"> <li>• <b>95%</b></li> </ul>

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# How I Do It Series NUMBER 6

## Day Case Laparoscopic Cholecystectomy

HARMEET KHAIRA & JULIAN HULL

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• <b>Standard day case criteria</b></li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• General anaesthesia: TIVA (Total IntraVenous Anaesthesia) comprising propofol and remifentanyl as target controlled infusions. Intubation or Laryngeal Mask and IPPV ventilation. Air/O<sub>2</sub> only. Short duration muscle relaxants as these operations can take less than 20 minutes. Routine iv fluids (minimum 1000ml Hartmann's). Routine anti-emesis (iv ondansetron 4mg and iv dexamethasone 4mg) as lap. Cholecystectomy has a high incidence of post-operative nausea and vomiting (PONV).</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• Standard positioning of patient with slight head-up tilt and table rotation towards surgeon. Use intermittent pneumatic compression for DVT prophylaxis. Local anaesthetic infiltration to all port sites before insertion of ports (20ml 0.25% chirocaine). Use of three 5mm ports and one 10mm port. Low pressure CO<sub>2</sub> insufflation (10mmHg) Meticulous washout at end of procedure. Instillation of 500ml warm saline containing 20ml 0.25% chirocaine around liver and gallbladder bed. No drains.</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• Peri-operative analgesia utilising a multi-faceted approach with NSAID, paracetamol, iv fentanyl (250-300mcg), local anaesthetic to wound sites and local anaesthetic wash to gall bladder bed</li> <li>• Post-operative analgesia: Analgesia requirements vary hugely between patients. Group directive allows recovery staff to titrate iv fentanyl or oral morphine for rapid relief of post-operative prior to return to DCU ward. Regular paracetamol and ibuprofen.</li> </ul>
<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• Regular oral paracetamol 1g qds and ibuprofen 600mg qds.</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• Ensure admission to day-case ward only.</li> <li>• Early introduction of fluids, diet and mobilization.</li> <li>• Allow home even if not passed urine.</li> </ul>
<b>Common Pitfalls</b>	<ul style="list-style-type: none"> <li>• Care should be taken not to inflate stomach prior to intubation. Pain and PONV need to be treated aggressively</li> </ul>
<b>Anticipated Day Case Rates</b>	<ul style="list-style-type: none"> <li>• 90%</li> </ul>

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## How I Do It Series NUMBER 7

# Day Case Trans-Urethral Resection of Prostate

MARY STOCKER & SEAMUS MACDERMOTT

(Original article published 2013, updated 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• Select patients who will cope with catheter at home</li> <li>• Limit to prostates of moderate size</li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• Spinal anaesthetic:             <ul style="list-style-type: none"> <li>• 2-3mls (40-60mg) 2% hyperbaric prilocaine</li> <li>• 1.5mls 0.5% (7.5mg) hyperbaric bupivacaine</li> </ul> </li> <li>• Or short acting general anaesthesia</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• IV antibiotics at induction</li> <li>• Standard monopolar or bipolar TURP</li> <li>• Ensure systolic BP &gt;100</li> <li>• Close attention to haemostasis</li> <li>• 3-way catheter for irrigation if needed</li> <li>• Mobilise after 1-2 hours or spinal block worn off</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• <b>Pre-operative:</b> oral paracetamol (1g) and ibuprofen (1600mg slow release)</li> <li>• <b>Intra-operative:</b> iv fentanyl if spinal not used</li> <li>• <b>Post operative:</b> regular paracetamol and ibuprofen</li> <li>• Rescue intravenous fentanyl or oral morphine if required</li> </ul>
<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• Paracetamol 500 mg/ codeine 30mg po qds, laxido 1 sachet bd, plus ibuprofen 600 mg po qds</li> </ul>
<b>Organisational Issues</b>	<ul style="list-style-type: none"> <li>• Catheter removed by district nurse next working day before 10am</li> <li>• Appointment with urology nurses that afternoon after 4pm for symptom check/ bladder scan</li> <li>• Notes to urology office to await histology</li> </ul>
<b>Anticipated Day Case Rates</b>	<ul style="list-style-type: none"> <li>• 30%</li> </ul>

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# How I Do It Series NUMBER 8

## Day Case Bipolar Saline Prostatectomy Service

SARAH M LLOYD & STUART LLOYD

(Original article published 2013, reviewed 2020)

<b>Patient Selection</b>	<ul style="list-style-type: none"> <li>• Benign prostatic hyperplasia or carcinoma of prostate.</li> <li>• Any size prostate.</li> <li>• Not contraindicated if known large middle lobe enlargement or a raised PSA suspicious of cancer.</li> <li>• Typically an elderly population with significant co-morbidities, but most will be acceptable including many ASA 3.</li> </ul>
<b>Anaesthetic Techniques</b>	<ul style="list-style-type: none"> <li>• Most patients have a general anesthetic with spontaneous ventilation through a LMA. This facilitates rapid recovery and early ambulation.</li> <li>• Some are managed using a spinal technique; due to its shorter duration of block, hyperbaric 2% prilocaine is now the drug of choice for this.</li> <li>• All patients receive IV gentamicin 2mg/Kg.</li> <li>• Patients receive 1 litre of IV normal saline solution during surgery and 1 further litre over the 2 hours following.</li> </ul>
<b>Surgical Technique</b>	<ul style="list-style-type: none"> <li>• A transurethral resection (TUR) technique using saline irrigation, which is not modified for day surgery.</li> <li>• Continuous activation of the loop is best to optimize the cutting potential. Intermittent activation is also an alternative.</li> <li>• 18 French gauge, Coude tip 3-way catheter with 20ml water to the balloon at the end of surgery. This permits irrigation for 1 to 2 hours if needed.</li> <li>• The irrigation port of the catheter is spigotted prior to discharge.</li> <li>• The patient goes home with a catheter for TWOC* at 2 days by either the Day Ward or district nurse / catheter specialist nurse.</li> </ul>
<b>Peri-operative Analgesia</b>	<ul style="list-style-type: none"> <li>• No pre-operative analgesia</li> <li>• Intra-operative fentanyl and IV paracetamol.</li> <li>• Postoperative regular paracetamol with codeine if needed.</li> <li>• Problems managing post-operative pain are uncommon after bipolar surgery.</li> </ul>
<b>Take Home Medication</b>	<ul style="list-style-type: none"> <li>• Paracetamol and codeine as required for 3 days</li> <li>• No post-operative antibiotics unless concern for infection then oral ciprofloxacin 500mg bd for 5 days</li> </ul>

\*TWOC = Trial WithOut Catheter

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<p><b>Organisational Issues</b></p>	<ul style="list-style-type: none"> <li>• The surgical technique for inpatient TURP is the same as for Day-case but staff in both the theatre and recovery areas need to be briefed on irrigation and catheter issues.</li> <li>• 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.</li> <li>• Patients who were not previously catheterized may need basic catheter care training, which is best done at the pre-assessment visit. Some patients may be planned for 23-hour stay; most can be discharged within 6 hours of surgery with a catheter.</li> <li>• Information leaflets regarding post-operative recovery and help-line numbers are essential</li> </ul>
<p><b>Common Pitfalls</b></p>	<ul style="list-style-type: none"> <li>• Excessive talking by the patient can distort the surgical view</li> <li>• Take great care to minimize intra-operative bleeding. Meticulous haemostasis is the key to success.</li> </ul>
<p><b>Anticipated Day Case Rates</b></p>	<ul style="list-style-type: none"> <li>• 90%.</li> </ul>