Same Day Surgery:
Transitioning to Outpatient Joints

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Medtronic
Challenges to Outpatient Joint Replacement

- Surgeon preparedness
- Anesthesia teamwork
- Facility readiness
- Patient Selection
- Preop Education
- Perioperative protocols
- Surgical technique
- Rehab protocols
- Support system
- Follow-up
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Surgeon Preparedness

How does a surgeon know when they’re ready to perform outpatient joint replacement? What criteria should be met? Surgical skill? Efficiency? Outcomes?

What will surgeon miss most from hospital when first performing TJA surgery in ASC?

How do you inform a surgeon that they are not ready for outpatient TJA?
Anesthesia Teamwork

Is regional anesthesia a requirement? Epidural vs spinal? Can general anesthesia be effective?

Are nerve blocks necessary to be successful?

How do you get anesthesiologists on board, or skilled in techniques/protocols?
Facility Readiness

What was biggest hurdle/limitation in the facility when starting program?

How much space is enough space? OR room number/size, recovery, implant space, autoclave?

How to best train staff used to only eyeballs and plastic surgery?
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Example of case where you realized that patient selection was critical?

Contraindication cutoffs?
Age, BMI, Hb, HbA1c, h/o PE/DVT, h/o stents

Case where failure was outside of typical selection criteria?

What changes to your preop education protocols did you make for your outpatients?
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Perioperative Protocols

Perioperative pain medication protocol? Toradol, Gabapentinoids, Cox-2, Acetaminophen, Clonidine, Ketamine, other?

Nerve blocks? Pain pumps? Periarticular injection?

Aspirin for dvt prophylaxis in all?

TXA route? dosing timing? repeat dose? when use topical?

Drains? Foleys? Pain catheters? Braces?

Blood draws in PACU? Postop xrays?
Tourniquet

- No intraoperative blood loss
- Improves visualization
- Cement technique better
- Saves time

Disadvantages:
- Thigh pain?
- Neuromuscular injury?
- Complications from prolonged use
- Patients with severe PVD
Emerging Trends

Tourniquetless TKA

• Potentially less pain
• Possibly faster recovery of muscle
• Requires optimal bleeding management

Courtesy of Medtronic
Coagulation Devices

- Ease of use
- Visible and audible feedback
- Immediate results
- Coagulation and collagen shrinkage
- Broad area of treatment
- Saline allows either broad coagulation of diffuse surfaces or spot treatment
- Can reach difficult areas
Aquamantys™ bipolar device achieves tissue sealing and coagulation with a radio-frequency energy and saline irrigation.

- Hemostatic sealing occurs at lower temperatures (<100 °C) than conventional electrocautery devices.
- Technology shrinks collagen in the walls of the tissue walls without causing charring or burning.
- Depth of penetration typically less than 2mm.
- Saline cools tissue during treatment and evenly conducts energy throughout tissue.
Aquamantys™ in TJA

Courtesy of Medtronic

Expose posterior structures of the hip, treat soft tissue bleeders as needed

Courtesy of Medtronic
Must Take Blood Loss out of the equation

A reliable way to control bleeding intra-operatively

- Lower Blood Loss
- Lower Drop in Hb
- Lower Transfusion
Perioperative Protocols

Nausea protocol? Scopolamie patch? Decadron? Treatment for home?

How avoid hypotension, dizziness postop?

Protocol for urinary retention? Flomax? d/c home with catheter?

Antibiotic protocol for discharge?
Surgical Technique

Change/Modification of knee surgical approach?

Do you have to do anterior hip approach for outpatient?

Navigation/computers/personalized guides necessary? beneficial?
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Rehab Protocols/ Follow-up

Change/modifyation of postop rehab protocols? Therapy still required?

What makes up the safety net?
• Care coordinator, RN, PA
• Home Health
• Telemedicine

Change in clinical follow-up protocols? Available postop clinic?