Modern Total Hip Replacement in an Ambulatory Surgery Center

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A Brief History of Total Hip Replacement

- Hip replacement 1990:
  - LOS 7 Days
  - Technique 80% Cemented; 20% Cementless
  - Cementless hips were toe touch on crutches for 6 weeks, then gradual weight bearing for 6 more weeks….3 months before off crutches.
  - Surgical procedure….More invasive.
  - Pain management-General anesthesia; IM Demerol/Vistaryl and IV MS
  - Implant life before revision 10 years+

Hip Replacement 2010

- LOS average 2.3 days
  - Technique 90% cementless; 10% cemented
  - Cementless hips are allowed full weight bearing day of surgery
  - Surgical procedure….less invasive, muscle sparing
  - Pain Management; A holistic pre/intra/and post op protocol.
  - Implant life before revision….20 years+

Why perform Hip replacement in the ASC? Can it be done safely?
Why Perform THA in an ASC?

- Young, healthy patients - Boomers
- Opportunity for rapid recovery
- Lower risk of infection
- Economic pressure from payers
- Opportunity to create a bundled payment
- Prepare for the future increase in demand

Why do it?

- Increased demand by patients, increased need for efficiency by Adult Reconstruction surgeons… 8-12 week waiting lists are common for high volume surgeons.
- Demand for THA will increase >300% over the next decade. Demand for TKA will increase >600%
- Fewer Adult Reconstruction surgeons

Why do it?

- Increased case load demands increased resources from society... efficiency will become increasingly important
- Risks with 23 hour discharge - Most life threatening complications occur in first 72 hours - Pulmonary Embolism, Myocardial Infarction, Arrhythmia, Bowel Obstruction... patient selection is the key to reducing these risks. These should be physiologically young, healthy people. A single severe complication can occur in the hospital or the ASC setting - be prepared
Pain Management

- Critical for rapid recovery
- Our Pain protocol (list it)
- Surgical Technique - Less invasive techniques allow for rapid return of strength.
- Pain protocol, surgical technique and rapid recovery reduce the risk of post op complications.

Patient Selection Criteria

- Age < 64
- ASA 1 or 2
- BMI < 28
- Home Support
- Patient is willing and able to return home after a 23 hour stay.

Reimbursement Issues

- ASC MUST know its fixed and variable costs for this procedure, including the cost of implants and providing overnight care
- Most PPO contracts are not set up for THA in an ASC… but they are changing
Pre Operative Patient Preparation

- Patient Education Booklet and class with caregiver
- Pre Operative Medical Assessment
- Teach relaxation and visualization techniques
- Discuss pre and post op diet
- Arrange for home health nursing visits and home PT

Day of Admission

- Pre Medication
- Surgeon signs the operative side
- Anesthesia

Intraoperative

BE PREPARED!!!

- Special Equipment needs – Space Suits; C-ARM; TRAYS; IMPLANTS;
- Patient Positioner (Peg Board)
- Complication Preparation – Intraoperative fracture, need for cement fixation....
- Experienced Surgical Team; Experienced Implant Representative
Postoperative-Set a Timeline

- **Nursing** - Two ICU nurses- maximum 1:1 nursing
- **Incentive spirometer, SCD’s, DVT prophylaxis**
  - Medications per pain protocol
- **Activity per protocol** - Sit up on bedside at 2 hours; begin walking at 5-6 hours; ambulate with a walker as tolerated. Prior to discharge need to be able to get into and out of bed on their own and climb stairs.

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Postoperative-Set a Timeline

- **Diet** - Light diet with ginger tea, high fiber. Progress to regular diet in AM before discharge.
- **Rest** - With 23 hour stay setting, patients get better sleep.

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Postoperative-Set a Timeline

- **Family** - Teach transfers, exercises, meals...they need to be available at home for the first few days.
  - 1-2 HOURS - Spinal wears off, patient wakes up
  - 3-6 HOURS - Patient sits up, dangles legs, light eating and drinking
  - 7-12 HOURS - Begin activity, teach walking, bed transfers
  - 13-20 HOURS - Sleep
  - 21-23 HOURS - Walk again, teach stair climbing, review safety precautions.
- **Surgeon makes rounds, checks wound, etc.**
Discharge

- Review home instructions with patient and caregiver
- Ensure that prescriptions have been filled for pain meds, walker, raised toilet seat, anticoagulation protocol
- Home Health Nursing visits, and Physical Therapy
- Post Op Follow up in my office at 7-10 days.

Final Thoughts

- Patients love it!
- Approximately 80 cases to date without complication
- Be selective!

Final Thoughts

First Do No Harm....
Thank You