5 Steps to a More Prosperous ASC

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“Complex Spine Surgery”

- Capital intensive
- Challenging setup
- Technically difficult
- Minimally invasive
  - Little pain
  - May be outpatient
Concerns

- Safety
- Unexpected admissions
  - Pain control
- Complexity of cases
  - Length of cases

Factors to consider

- Implant costs
- Medicare definitions of outpatient surgery
  - Length of procedures
  - Few spine surgeries
- Staff familiarity with spine procedures
  - Capability of staff and anesthesia support
- Conflicts of interest
- Initial capital costs

Factors to consider

- Patient factors
  - Age / Comorbidities
  - Payer
  - Patient Preference
Which Procedures?

- Cervical
  - Foraminotomies
- Endoscopic
  - Disc replacement
  - Anterior cervical discectomy and fusion

Which Procedures?

- Thoracic
  - Kyphoplasty / Vertebroplasty
  - Biopsy
- Lumbar
  - Discectomy
  - Decompressions
  - Interspinous process spacers / X-Stop

Kyphoplasty

QuickTime™ and a YUV420 codec decompressor are needed to see this picture.
Literature Support for Outpatient Microdiscectomy

- Griffith, Br J Neurosurg 1987
  - A selected series of 14 patients with lumbar disc prolapse causing sciatica have been operated successfully with outpatient (daycase) surgery. Postoperative pain has been much less than expected. This form of surgery has proved very acceptable to patients and to their family doctors.

Literature Support for Outpatient Microdiscectomy

- Zahrawi, Spine 1994
  - 1985-1989 103 patient with HNP
  - 34.6 month follow-up
  - 96% would have surgery in ASC
  - 3 stayed overnight
  - nausea, urinary retention
  - 1 superficial infection
  - 1 re-herniation
  - No: dural tears, phlebitis, PE, neurologic deficit

Outpatient Lumbar Decompression

- Best, J Spinal Disorders and Tech 2006
  - 1992-2001 1377 patients with HNP or stenosis
Age >65

- Best, Spine 2007
  - 263 of these on patients 65 years of age or older
  - 4.1% were converted to inpatient status
    - pain, sedation, or urinary retention
  - 3.4% total complication rate
    - infection most common

Outpatient Cervical Decompression

- Tomaras J Neurosurg
  1997
  - 200 patients
  - No unexpected admissions
  - 3 complained of symptoms of nausea after discharge

Outpatient Cervical Fusion

- Fountas, Spine 2007
  - 0.1% Mortality
  - 19.3% Morbidity
    - 9.5% dysphagia
    - 5.6% Hematoma
    - 2.4% surgical intervention
    - 3.1% Recurrent laryngeal nerve palsy
    - 0.5% Dural tear
    - 0.3% Esophageal perforation
    - 0.02% Neural injury
  - 0.1% Mortality
  - 19.3% Morbidity
    - 9.5% dysphagia
    - 5.6% Hematoma
    - 2.4% surgical intervention
    - 3.1% Recurrent laryngeal nerve palsy
    - 0.5% Dural tear
    - 0.3% Esophageal perforation
    - 0.02% Neural injury
Outpatient Cervical Fusion

- Stieber, Spine J 2005
  - 90 consecutive patients
  - 1-2 level cervical fusion
  - 10% minor complications

Outpatient Cervical Fusion

- Erickson, Am J Orthop 2005
  - 56 patients
  - 1-3 level cervical fusions
  - No admissions
  - 1 infection

Outpatient Cervical Fusion

- Liu, BMC 2009
  - 64 Inpatients
    - 4 Complications
  - 45 Outpatient
    - No Complications
    - No admissions
Outpatient Cervical Fusion

- Fountas, Spine 2007
- 0.1% Mortality
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Once decision has been made

- Discuss all of the previous concerns with the ASC
  - Physicians, Nurses, Administrators
  - Determine level of support

Decide which cases

- Realistically assess your cases before moving to an ASC
  - Length, post procedure pain, likely hood of admission
- Make detailed lists of equipment and preference sheets
  - Verify that all is in place before the first case
  - Inservice / dry run
  - Start small (single level, straight forward, quick, healthy)
Techniques to Minimize Pain

- Pre-incision local anesthetic
  - 10cc 0.25% marcaine
- Minimize use of bovie Medial branch block
- Muscle splitting techniques
- Local anesthetic at the end
  - 10cc 0.25% marcaine with 100 mcg fentanyl
- Do not place foley or remove promptly

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Moving Forward

- Reassess
- Grow indications in time
- Motivation should be quality care
- Always think safety
  - In spine surgery you are remembered not for your successes as much as for your failures
5 Steps to a More Prosperous ASC

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Thank You

Bibliography


12. Performing Complex Spine Procedures in an ASC

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pinnacle
Advantages of an ASC

- Flexibility in scheduling
  - May decompress a busy hospital Operating Room schedule
- High patient satisfaction
- Control over work environment

Physician Selection

- Fellowship trained
- Commitment and motivation
- Credentialing
- Approved procedure list
- Owner/investor buy-in
  - Existing owners
  - Opportunities
- Marketing efforts
- Satisfaction

Patient Selection

- Determine selection criteria.
  - Acuity
  - Geographic
- Assess expectations.
  - Patient driven care
    - Self-referrals
    - Increased knowledge
    - Internet
  - Perception of procedural process
    - Mobilization and recovery
- Success
  - Complications
  - Infections
  - Satisfaction
  - Back to work
  - Back to life
Staff Selection

- Motivated to quality and innovation.
- Assess expectations.
- Provide education, in-servicing, and praise.

Equipment & Instrumentation

- Assess current inventory.
- Consider overall needs and costs.
  - Determine ROI.
- Purchase or lease?
- Establish and maintain vendor relationships.

Reimbursement

- Review charge master.
- Review current contracts.
  - Groupers
  - Flat fees
  - Implants
- Assess staff commitment.
  - Coding and collecting = key elements for success
EVERYONE MUST BE COMMITTED TO ENSURING SAFE & SUCCESSFUL CARE TO ALL PATIENTS.

Questions?

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