Knee Injections

Indications

- 1. Diagnostic
 - Evaluation of effusion / monoarthritis
 - Evaluation of traumatic effusion (hemarthrosis)
 - Crystal-induced arthropathy
- 2. Therapeutic
 - o Limit joint damage by removal of infected or inflamed fluid
 - o Symptomatic relief of large effusion
 - o Administration of agents to improve osteoarthritis

Contraindications

- 1. Bacteremia or overlying infections (cellulitis)
- 2. Coagulopathy
- 3. Pt uncooperative
- 4. Injection of steroid into potentially septic joint
- 5. Presence of prosthesis
- 6. Unfamiliarity w/procedure

Procedure

- 1. Approach and technique
 - Anterior medial or lateral
 - Theoretical risk of hitting meniscus when using this technique
 - Lateral or medial suprapatellar approach
 - Can be done w/pt supine
 - Leg either extended or flexed 20-30°, depending on preference
 - Superior, lateral aspect of patella is identified
 - Skin is marked 1 finger breadth above and 1 finger breadth lateral to site
 - Skin prepped
 - 1 1/2 inch 20 GA needle inserted at 45° angle distally and 45° into knee below patella
- 2. Knee shouldn't be aspirated from popliteal space
 - o Although superficial Baker's cysts can be aspirated
- 3. Injection following aspiration can be performed by
 - Applying hemostat
 - Removing aspirating syringe
 - Attaching injection syringe
 - Steroid injection = 1 mL betamethasone or methylprednisolone mixed with 3-5 mL 1% lidocaine

Pitfalls

- 1. Needle tip should pass freely and easily into joint space and not touch nearby structures
 - o Touching bone or cartilage will cause significant pain

- 2. When changing syringe
 - Avoid movement of needle while removing, reapplying or injecting into joint
- 3. When injecting steroid into knee joint
 - Warn pt of potential for steroid flare reaction that may occur 12-72 hr after injection
 - o May mitigate w/use of NSAID

CPT Codes

- 1. 20610 Arthrocentesis, aspiration and/or injection; major joint or bursa (shoulder, hip, knee joint, subacromial bursa)
- 2. May need to use a HCPCS "J" code plus code for what is administered (coverage may vary by carrier, consider use of ABN prior to injection)
- 3. In all cases need to also use appropriate ICM-9 code for diagnosis

References

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- 5. Renner JB, Wilson FC. Diagnostic modalities: imaging, joint aspiration, and arthroscopy. In Wilson FC, LinPP, eds. General orthopedics. New York: McGraw-Hill, 1997:105-128.

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