SUTTER PHYSICIANS ALLIANCE (SPA)
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SPA PCP Treatment & Referral Guideline
Orthopedics

Developed February 1, 2003
Reviewed: August 20, 2008

I. Shoulder Pain

A. Acute – pain duration less than approximately six (6) weeks.

History and Physical

1) Physical findings indicative of external trauma (deformity, crepitus, ecchymosis, etc.)
   a) X-ray indicated. Views A/P (IR & ER), scapular "Y" view, axillary view
      - If X-ray negative, conservative treatment
      - If X-ray positive, consultation with orthopedic surgeon may be indicated.
      - Do not forget to consider injury to the AC joint.
      - Need to consider Slap lesion, labial tear.
2) Physical findings indicative of rotator cuff tear (inability to elevate arm above 45 degrees)
   a) X-rays as above are indicated.
      - ROM exercises (codman, pendulum – consider Physical Therapy (P.T). if pain not too severe)
      - Pain relief
      - Recheck 2-4 weeks
   b) If improving, continue conservative treatment. If no improvement, consider formal physical therapy if not started. Arthrogram, MRI, or MR Arthrogram may be indicated
      - If positive – orthopedic consultation
      - If negative – continue conservative treatment and definitely institute P.T.

B. Chronic – pain duration more than approximately six (6) weeks.

History and Physical

1) Findings consistent with impingement syndrome (pain with maximum elevation of arm and Neer's impingement sign, Hawkins impingement sign, or testing strength of supraspinatus or of course painful arc of motion.)
   a) Therapy is the same for Calcific tendonitis or arthritis.
      - Conservative treatment (anti-inflammatories, and home exercises)
      - Return to office 2-4 weeks, if improving continues conservative treatment. If not improving consider P.T. or subacromial injection.
      - Return again for recheck in 2-4 weeks. If still no improvement, X-ray indicated. A/P (IR + ER and outlet, axillary view). Results of X-ray can lead to further decisions towards orthopedic consultations, injections or continuing P.T.
2) Findings consistent with adhesive capulitis (frozen shoulder) – limited external rotation with arm at side is key finding
   a) Anti-inflammatories and home exercises. P.T. to be considered if patient is not having too much pain.
   b) Return to office 2-4 weeks (make sure adequate pain relief)– consider P.T. and / or injection:
      - No response – order X-rays and refer. X-rays should be A/P (IR & ER) plus outlet, axillary view.

Addendum:
Intraarticular injections can be continued if the patient is improving. Recommend no more than three given a year and at least one month apart.

II. Ankle Pain

A. Acute – pain duration less than approximately six (6) weeks.

History and Physical

1) Physical findings indicative of grade 1 or 2 ankle sprain.
   a) X-ray indicated (AP, lateral and mortise views) if one of the following is true: Bone tenderness over lateral or medial malleolus, patient unable to bear weight both immediately post injury and in office, age <18, intoxication, multiple injuries, pregnancy, head injury, diminished sensation due to neurological deficit. **Note: Pain over navicular bone or base of 5th metatarsal may indicate fracture of the foot and radiographs are warranted.**
      - If X-ray negative, conservative treatment: Rest, Ice, Compression (air cast, elastic wrap ace bandage), Elevation, NSAIDs, Crutches as needed, when pain free an ankle rehabilitation program or physical therapy should be instituted.
      - If X-ray positive, consultation with orthopedic surgeon may be indicated.
2) Physical findings indicative of grade 3 ankle sprain (severe pain, severe swelling, unable to bear weight, laxity of joint)
   a) X-rays are indicated. (AP, lateral and mortise views)
      - If X-ray negative conservative therapy vs. surgery (literature is controversial) Consultation with orthopedic surgeon may be indicated.
   b) Conservative treatment: Rest, Ice, Compression (air cast, elastic wrap ace bandage, cam walker, cast if needed), Elevation, NSAIDs, Crutches as needed, when pain free an ankle rehabilitation program or physical therapy should be instituted.
      - If X-ray positive, consultation with orthopedic surgeon may be indicated.

B. Chronic ankle injury – pain or instability duration more than approximately six (6) weeks.

History and Physical

1) Findings consistent with ankle instability ("giving way, but no pain")
   a) Obtain stress x-rays.
      - If positive then physical therapy or possible surgical reconstruction.
      - If negative then physical therapy.
2) Findings consistent with ankle pain
   a) Repeat x-rays. (AP, lateral and mortise views)
      - If positive then consider conservative therapy or possible surgical reconstruction.

- If negative then consider conservative therapy for 3-6 weeks. If fails then consider steroid injection and physical therapy for 3-6 weeks. If fails then consultation with a surgeon.

III. Knee Pain

A. Acute – pain duration less than six (6) weeks.

History and Physical

1) History or Physical findings indicative of external trauma / infection, acute arthritis (pivot with "pop"; direct blow; rapid effusion)
   a) X-ray indicated (A/P; Lateral; Oblique)
      - If X-ray positive, consider referral.
      - If X-ray negative, consider therapeutic/diagnostic tap to rule out infection or acute arthritis.
      - Based on tap results consider conservative treatment/referral.

2) No history or physical findings indicative of external trauma.
   (no effusion; slow effusion)
   a) Physical consistent with internal derangement.
      (positive Lachman's; McMurry's etc.)
      - X-rays as above. Referral if positive.
      - X-ray negative – Conservative treatment with stretching, exercises, meds. PT based on pt. desire for conservative vs. aggressive Rx. Remember there can be significant pathology with negative X-Rays i.e. ligaments, cartilage.
      - For aggressive treatment or no improvement with conservative treatment = Referral to Ortho (MRI per orthopedics)
   b) Physical showing no evidence of internal derangement.
      - Conservative treatment with exercises, meds, brace (2-4 weeks)
      - No improvement = Add PT; consider X-rays (2-4 weeks)
      - No improvement = Orthopedics referral.

B. Chronic – pain greater than six (6) weeks.

History and Physical

1) Findings consistent with internal derangement (Lachman's, McMurry's etc.)
   - X-rays Indicated (AP, weight bearing and lateral of involved knee) Referral if positive other than osteoarthritis.
   - X-ray negative – Conservative treatment with stretching, exercises, meds. PT based on pt. desire for conservative vs. aggressive Rx.
   - For aggressive treatment or no improvement with conservative treatment = Referral to Ortho (MRI per orthopedics)
2) Findings consistent with RA/ OA/ Gout/ etc. (effusion; warmth; etc)
   - Consider X-ray (subchrondral cysts/ erosions)
   - Consider Diagnostic tap (gout, pseudogout, RA)
   - Conservative treatment based on findings of above.

- Medications, exercises, brace (2 weeks)
- Add PT; Consider cortisone injection.
- No improvements with above consider specialty referral.

IV. Hip Pain

A. Acute – pain duration of less than approximately six (6) weeks.
History and Physical -

1) Most important physical finding indicating intra-articular pathology is pain with a limitation of internal rotation of the hip. Physical finding indicative of trauma (especially in elderly, unable to ambulate, swelling, holding hip in external rotation).
   a) X-rays indicated (AP Pelvis and lateral of affected hip).
      - If X-ray negative, conservative treatment (remember early X-Ray could be negative consider repeat film in 10 days to 2 weeks if pain persists).
      - If X-ray positive for fracture or dislocation, consider consultation with orthopedist.
2) Physical finding indicative of septic arthritis (especially in children, refusal to walk or bear weight, fevers). **Remember knee pain in children means hip pain until proven otherwise.**
   a) X-rays (AP Pelvis and frog leg view) are indicated
      - If X-rays negative, continue with workup as below
      - If X-rays positive, consider orthopedic consultation
   b) Labs (CBC, ESR, CRP (C-reactive protein), possible Blood culture) are indicated
      - If labs normal (ESR <20) consider conservative management with close follow up. Likely diagnosis is transient synovitis.
      - If labs abnormal, consider early orthopedic consultation.
3) Physical findings indicative of slipped femoral capital epiphysis (especially adolescents, often obese). Especially decreased ROM, pain on ROM, and external rotation deformity.
   a) X-rays (AP and Frog leg of pelvis) indicated
      - If X-rays negative conservative management. Consider MRI if concern for a vascular necrosis (see 4, below)
      - If X-rays positive, orthopedic consultation required.
4) Physical findings indicative of avascular necrosis (symptoms include decreased ROM, pain ROM especially trauma, corticosteriod usage, lupus). (Note: adolescent female athletes and dancers at risk for femoral neck stress fracture have similar physical findings and work up.)
   a) X-Rays (AP and frog leg of pelvis) are indicated
      - If X-rays negative, consider MRI if clinical suspicion is high.
      - If X-rays positive, orthopedic consultation required.

B. Chronic – pain duration of approximately six (6) weeks or more.

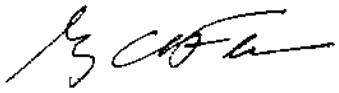
History and Physical – again, pain with or limitation of internal rotation is most indicative of intra-articular pathology.

1) Physical findings indicative of osteoarthritis.

a) X-rays (AP Pelvis and lateral of affected hip (s)) are indicated
   - If X-rays positive, management with Tylenol / NSAIDs / glucosamine and chondroitin (may take four to six months to cause relief). Consider physical therapy if not improving. Consider orthopedic consultation if severe pain, considering joint replacement.
   - If X-rays negative conservative management as above, may consider alternative diagnosis.

2) Physical findings indicative of trochanteric bursitis (localized tenderness to greater trochanter of hip on exam).
   a) Consider X-ray to rule out other pathology.
   b) Conservative management (Tylenol, NSAIDs, ice) for 4-6 week trial.
   c) If not improving, consider corticosteriod injection (over trochanteric bursa at site of maximal tenderness on palpation).
3) Physical findings indicative of iliotibial band dysfunction (often athletes, runners, pain +/- "snapping" around greater trochanter, may radiate down thigh to lateral knee).
   a) Consider X-rays to rule out other pathology.
   b) Conservative management, IT Band stretching. Consider physical therapy referral if not better in 4-6 weeks.
4) Physical findings indicative of lateral femoral cutaneous nerve syndrome (meralgia paresthetica). (pain, burning, numbness, in anterolateral thigh to knee)
   a) Consider X-rays to rule out other pathology.
   b) Conservative management. Consider weight loss/removal of outside constriction on nerve (belt, backpack).

APPROVAL:



SMF/SPA Medical Director

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Date

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SMG Division Chiefs	Date: October 27, 2008
SIP AMD's	Date: October 27, 2008
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