American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 5 – Cornerstones of Disability Prevention and Management

Functional Restoration

If an early return to work has been achieved and the return-to-work process is working well, the likelihood of debilitation should be limited. If, however, there is a delay in return to work or a prolonged period of inactivity, a program of functional restoration can be considered. Such a program could include components of aerobic conditioning as well as strength and flexibility assessment where necessary. It is also worth noting that preinjury and postinjury or illness strength and endurance may be limited and might be less than the job requires. If this is the case, the likelihood of reinjury or prolonged problems may increase. Though it may not be part of the process for treating an acute injury, the provider and employer may have to address these issues either through focusing on modifying the job to suit the patient’s abilities or considering alternative placement.

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 6 – Pain, Suffering, and the Restoration of Function

Physician Guidelines for Dealing with Potentially Chronic or Chronic Injuries

In general, intervention for treating pain should be time-limited and goal-oriented. Persons returning to work in six months or less after injury tend to have the best outcomes. Persons who have been out of work for a year or more tend to have poor return-to-work outcomes. Early detection of potential chronicity also may be an important step in defining early treatment approaches to treating pain or disability because early intervention may increase successful return to work. Clinicians may use several published tools to examine the potential of developing a chronic pain problem (see “Pain Assessment Models and Tools,” at the end of this chapter). Properly interpreted, such tools may help identify persons who need more than just interventional pain care and are unlikely to respond to simple pain-treatment approaches.

Research suggests that multidisciplinary care is beneficial for most persons with chronic pain, and likely should be considered the treatment of choice for persons who are at risk for, or who have, chronic pain and disability. Flor et al. (1992) conducted a meta-analytic review of multidisciplinary pain treatment for chronic back pain, which concluded that chronic pain patients treated in multidisciplinary programs were functioning better than 75% of control patients who either received no treatment or who were treated by conventional unimodal approaches.

Multidisciplinary treatment was found to be superior to conventional physical therapy alone, had benefits that persisted over time, and was beneficial in improving return to work and decreasing use of health care. While the components and approaches of multidisciplinary care often differ, the hallmarks of such programs include:

• Thorough, multidisciplinary assessment of the patient

• The establishment of a time-limited treatment plan with clear functional goals

• Frequent assessment of the patient’s progress toward meeting such goals

• Modification of the treatment plan as appropriate, based on the patient’s progress

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 7 – Independent Medical Examinations and Consultations

The occupational health practitioner may refer to other specialists if a diagnosis is uncertain or extremely complex, when psychosocial factors are present, or when the plan or course of care may benefit from additional expertise. A referral may be to aid in the diagnosis, prognosis, therapeutic management, determination of medical stability, and permanent residual loss and/or the examinee's fitness for return to work.

Making Recommendations

The consensus view is that examiners should make recommendations in response to questions posed by, or implied by, the examination request. Recommendations should be based on the available evidence, or if lacking evidence, consensus views of what is effective (with benefits outweighing risks). Such recommendations may include the need for further testing to define the condition in question, either to further the analysis of causation or to clarify the diagnosis. Recommendations may also be called for regarding further treatment, the prognosis for further improvement, physical or mental impairment, the examinee’s current or future work capacity, the need for vocational rehabilitation, and the potential for employment.

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 8 – Neck and Upper Back Complaints

Table 8-8 Summary of Recommendation for Evaluating and Managing Neck and Upper Back Complaints

Clinical Measure: Medication

Recommended: Acetaminophen (C), NSAIDs (B)

Optional: Opioids, short course (C)

Not Recommended: Use of opioids for more than 2 weeks (C), Muscle relaxants (D)

Clinical Measure: Physical Treatment Methods

Optional: Physical manipulation for neck pain early in care only (B), At-home applications of heat or cold (D), Radio-frequency neurotomy (C)

Not Recommended: Traction (B), TENS (C), other modalities (D)

Clinical Measure: Injections

Optional: Epidural injection of corticosteroids to avoid surgery (D), Botulinum toxin (dystonia only) (B)

Not Recommended: Facet injection of corticosteroids (D), Diagnostic blocks (D)

Clinical Measure: Rest and Immobilization

Optional: 1 or 2 days’ partial bed rest for severe pain (D)

Not Recommended: Bed rest longer than 1 or 2 days (B), Cervical collar more than 1 or 2 days

Clinical Measure: Detection of Neurologic Abnormalities

Recommended: EMG to clarify nerve root dysfunction in cases of suspected disk herniation preoperatively or before epidural injection (D)

Optional: SEPs if spinal stenosis or myelopathy suspected (D)

Not Recommended: EMG for diagnosis of nerve root involvement if findings of history, physical exam, and imaging study are consistent (D)

Clinical Measure: Radiography

Recommended: Initial studies when red flags for fracture, or neurologic deficit associated with acute trauma, tumor, or infection are present (D)

Not Recommended: Routine use in first 4 to 6 weeks if red flags are absent (D)

Clinical Measure: Other imaging procedures

Recommended: MRI or CT to evaluate red-flag diagnoses as above (D), MRI or CT to validate diagnosis of nerve root compromise, based on clear history and physical examination findings, in preparation for invasive procedure (D), If no improvement after 1 month, bone scan if tumor or infection possible (D)

Not Recommended: Imaging before 4 to 6 weeks in absence of red flags (C, D)

Clinical Measure: Surgical considerations

Recommended: Careful preoperative education of the patient regarding expectations, complications, and short-term sequelae of surgery (D), Indications clear of failed conservative treatment and history, exam, and imaging consistent for specific lesion (D)

Not Recommended: Discectomy or fusion without conservative treatment 4 to 6 weeks minimum (D)

Discectomy or fusion for nonradiating pain or in absence of evidence of nerve root compromise (D)

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 9 – Shoulder Complaints

Acupuncture

Some small studies have supported using acupuncture, but referral is dependent on the availability of experienced providers with consistently good outcomes.

Special Studies and Diagnostic and Treatment Considerations

For most patients with shoulder problems, special studies are not needed unless a four- to six-week period of conservative care and observation fails to improve symptoms.

Routine testing (laboratory tests, plain-film radiographs of the shoulder) and more specialized imaging studies are not recommended during the first month to six weeks of activity limitation due to shoulder symptoms, except when a red flag noted on history or examination raises suspicion of a serious shoulder condition or referred pain.

Table 9-6 Summary of Recommendation for Evaluating and Managing Shoulder Complaints

Clinical Measure: Medication

Recommended: Acetaminophen (C), NSAIDs (B)

Optional: Opioids, short course (C)

Not Recommended: Use of opioids for more than 2 weeks (C), Muscle relaxants (D)

Clinical Measure: Physical treatment methods, activities and exercise

Recommended: Maintain activities of other parts of the body while recovering (D)

Maintain passive range of motion of the shoulder with pendulum exercise and wall crawl (D), Treat initially with strengthening or stabilization exercises for impingement syndrome, rotator cuff tear, instability, and recurrent dislocation (C, D)

Optional: At-home applications of heat or cold packs to aid exercise (D), Short course of supervised exercise instruction by a therapist (D)

Not Recommended: Passive modalities by a therapist (unless accompanied by teaching the patient exercises to carried out at home) (D)

Clinical Measure: Injections

Recommended: Two or three sub-acromial injections of local anesthetic and cortisone preparation over an extended period as part of an exercise rehabilitation program to treat rotator cuff inflammation, syndrome, or small tears (C,D), Diagnostic lidocaine injections to distinguish pain sources in the shoulder area (e.g., impingement) (D)

Not Recommended: Prolonged or frequent use of cortisone injections into the sub-acromial space or the shoulder joint (D)

Clinical Measure: Rest and immobilization

Recommended: Brief use of a sling for severe shoulder pain (1 to 2 days), with pendulum exercises to prevent stiffness in cases of rotator cuff conditions (D), Three weeks use, or less, of a sling after an initial shoulder dislocation and reduction (C), Same for AC separations or severe sprains (D)

Not Recommended: Prolonged use of a sling only for symptom control (D)

Clinical Measure: Detection of physiologic abnormalities

Recommended: Rarely, nerve conduction time of the suprascapular nerve for cases of severe cuff weakness unaccompanied by signs of a rotator cuff tear (D)

Not Recommended: EMG or NCV studies as part of a shoulder evaluation for usual diagnoses (D)

Clinical Measure: Radiography

Optional: For acute AC joint separations, stress films (views of both shoulders, with and without patient holding 15-lb weights) (D)

Not Recommended: Routine radiographs for shoulder complaints before 4 to 6 weeks of conservative treatment (D), Stress films for instability (D)

Clinical Measure: Other imaging procedures

Recommended: MRI for preoperative evaluation of partial-thickness or large full-thickness rotator cuff tears (C, D)

Optional: Arthrography for preoperative evaluation of small full-thickness tears (C), Bone scan for detection of an AC joint arthritis (D)

Not Recommended: Routine MRI or arthrography for evaluation without surgical indications (D), Ultrasonography for evaluation of rotator cuff (C)

Clinical Measure: Surgical considerations

Recommended: Anterior repair for recurrent dislocation after 2 to 3 dislocations (D), Resection of outer clavicle for chronic disabling AC joint pain after conservative care of acute separation (C), Rotator cuff repair after firm diagnosis is made and rehabilitation efforts have failed (D), Capsular shift surgery for disabling instability (D), Subacromial decompression after failure of non-operative care (C)

Not Recommended: Anterior repair for initial shoulder dislocation (C), Acute repair of AC separation (C), Acute repair of rotator cuff tears, except for massive acute tears (C), Surgery for recurrent dislocation of instability before rehabilitation efforts (C)

American College of Occupational and Environmental Medicine, 2nd Edition (2007)

Chapter 10 – Elbow Disorders (Revised)

Table 4. Summary of Recommendation for Evaluating and Managing Elbow Complaints

Clinical Measure: Medication

Recommended: Oral NSAIDs (B), Topical NSAIDs (B), Acetaminophen (I), Aspirin (I), Ketamine gel for neuropathic pain (I), NSAIDs for ulnar neuropathies (I), Systemic antibiotics and aspiration/drainage for infected bursa (I)

Not Recommended: Opioids are not recommended for routine use. However, they may be used in an acute elbow injury or inflammation with redness, heat, swelling concurrently with an anti-inflammatory, ice, and rest and tapered off after 2 to 3 days (I)

Clinical Measure: Physical Treatment Methods

Recommended: Ultrasound treatment for epicondylalgia (B), Iontophoresis for epicondylalgia with either glucocorticoid or diclofenac (C), At-home applications of heat or cold packs for comfort (I), Acupuncture for epicondylalgia (I)

No Recommendation: Manipulation (I), Massage (I), Friction massage (I), Soft tissue mobilization (I), TENS (I), Biofeedback (I), Electrical stimulation (I), Magnets (I), Diathermy (I)

Not Recommended: Extracorporeal shock wave therapy (A), Low-level laser therapy (A), Phonophoresis (C)

Clinical Measure: Injections

Recommended: Local corticosteroid injections for medial and lateral epicondylalgia have evidence of short term efficacy while simultaneously having demonstrated no long-term efficacy. Should only be considered after 3-4 weeks of conservative treatment has failed. (B), Bupivacaine is superior to lidocaine when combined with corticosteroid in lateral epicondylar injections (C)

No Recommendation: Corticosteroid injection into olecranon bursa only after failure of initial care (I),

Botulinum toxin injection for lateral epicondylalgia (I)

Not Recommended: Autologous blood injection (I)

Clinical Measure: Orthotics and Immobilization

Recommended: Protection, rest, ice, compression, elevation, and mobilization for contusion (I), Limited (i.e., sling or posterior elbow splint) and then early mobilization for non-displaced radial head fracture (I), Epicondylalgia supports for epicondylalgia (I), Dynamic extensor brace for lateral epicondylalgia (I), Wrist splinting for epicondylalgia (I), Wrist splinting for radial tunnel syndrome (I), Nocturnal elbow splinting for ulnar neuropathy (I), Daytime padding for ulnar neuropathies at the elbow (I), Avoidance of leaning on the ulnar nerve at the elbow for ulnar neuropathies (I), Avoidance of prolonged hyperflexion of the elbow for ulnar neuropathies (I), Padding the elbow for sterile effusion of the olecranon bursa (I), Posterior splint for elbow dislocation (I), Shoulder sling for elbow sprain (I), Wrist brace for pronator syndrome (I)

Not Recommended: Trial of casting for severe recalcitrant epicondylalgia (I)

Clinical Measure: Activity/Exercise

Recommended: Exercise instruction by a therapist for epicondylalgia (I), Physician recommendations for range-of-motion instruction and strengthening exercises in epicondylalgia patients (I), Stretching (I), Aerobic exercise (I), Activity modification (I), Workstation modifications (I)

Clinical Measure: Detection of Neurological Abnormalities

Recommended: NCS to confirm ulnar nerve entrapment if conservative treatment fails (I), NCS to distinguish radial entrapment from lateral epicondylalgia if history and physical exam are equivocal and conservative treatment fails (I)

Clinical Measure: Radiography/Other Imaging Studies

Recommended: MRI for suspected ulnar collateral ligament tears (C), Plain-film radiography for red-flag cases (I)

Not Recommended: Repeat plain-film radiography for readings with “fat pad sign” (I), MRI for suspected epicondylalgia (I)

Clinical Measure: Surgical Considerations

Recommended: Simple decompression for ulnar nerve entrapment (C), Simple ulnar nerve release for patients with significant activity limitation and delayed NCS (C), Anterior transposition for ulnar nerve entrapment in patients with significant activity limitation and delayed NCS or failed simple release (I), Excision for infected olecranon bursitis if not responsive to IV antibiotics, aspiration and drainage (I), Radial tunnel decompression for failure of conservative treatment and positive electrodiagnostic studies (I), Debridement of inflammatory or scarred tissue for patients with epicondylalgia if conservative treatment fails (I), Surgery for biceps rupture (I), Surgery after at least 6 months of conservative treatment with failure to show signs of improvement (at least 3 months in unusual circumstances) (I)

Not Recommended: Submuscular transposition of the ulnar nerve at the elbow (C), Excision of olecranon bursa due to metabolic arthritis before appropriate medical treatment (I), Medial epicondylectomy for ulnar neuropathy (I), Ulnar nerve surgery in the presence of normal electrical studies (I)

American College of Occupational and Environmental Medicine, 2nd Edition (2007)

Chapter 10 – Elbow Disorders (Revised)

Table 5. Summary of Recommendation by Elbow Disorder

Elbow Disorder: Contusion

Recommended: Protection, rest, ice, compression, elevation, and mobilization (I)

Elbow Disorder: Olecranon Bursitis (Aseptic)

Recommended: Soft padding of the elbow (I), Modifying activities to avoid direct pressure over the olecranon (I), Surgery if after at least 6 weeks of conservative treatment with failure to show signs of improvement (I)

No Recommendation: Corticosteroid injection for persistent symptoms (I)

Not Recommended: Corticosteroid injection as part of initial care (I)

Elbow Disorder: Olecranon Bursitis (Septic)

Recommended: Elbow passing (I), Avoid direct pressure (I), Aspiration and antibiotics (I), Surgery (I)

Elbow Disorder: Non-displaced Radial Head Fracture

Recommended: Sling/splint for 7 days followed by gentle range of motion exercises then progressive mobilization. Range-of-motion exercises should involve the elbow, but also the shoulder and wrist. A shorter immobilization period of as little as 3 days may be used for nondisplaced fractures that are clinically present but not visible on x-ray. (I)

Elbow Disorder: Dislocation of the Elbow

Recommended: Post-reduction x-rays and examination necessary (I), Posterior splint for 10 days (I), Range-of-motion exercises after immobilization. Range-of-motion exercises should involve the elbow, but also the shoulder and wrist. (I), NSAIDs (I)

Elbow Disorder: Sprain of the Elbow

Recommended: NSAIDs (I), Shoulder sling may be used for up to 1 week (I), Gentle range-of-motion exercises of the elbow, but including the shoulder and wrist (I)

Elbow Disorder: Biceps Tendinosis

Recommended: Sling for severe cases with gentle range-of-motion exercises of the elbow, but including the shoulder and wrist (I), NSAIDs (I), Activity Limitations (I)

Elbow Disorder: Ulnar Nerve Entrapment (including Cubital Tunnel Syndrome)

Recommended: Avoid prolonged hyperflexion of elbow (I), Elbow padding (I), Avoid leaning on elbow (I), NSAIDs (I), Simple decompression (C), Anterior transposition after 3–6 months (rare cases) (I)

Not Recommended: Submuscular transposition (C), Medial epicondylectomy for ulnar neuropathy (I)

Elbow Disorder: Radial Nerve Entrapment (including Radial Tunnel Syndrome)

Recommended: NSAIDs (I), Confirmatory electrodiagnostic study helpful (I), Wrist splint for periodic daytime use (I),Surgery after at least 6 months of conservative treatment with failure to show signs of improvement (at least 3 months in unusual circumstances) (I)

Elbow Disorder: Pronator Syndrome

Recommended: NSAIDs (I), Activity modifications (I), Confirmatory electrodiagnostic study helpful (I), Wrist brace (I), Surgery after at least 6 months of conservative treatment with failure to show signs of improvement (at least 3 months in unusual circumstances) (I)

Elbow Disorder: Lateral Epicondylalgia (Lateral Epicondylitis)

Recommended: Acetaminophen (I), Aspirin (I), Heat or cold packs (I), Topical NSAIDs (B), Oral NSAIDs (B), Home exercise (I), Epicondylalgia supports (I), Activity modification (I), Workstation modifications (I), Ultrasound (B), Iontophoresis (C), Acupuncture (I), Cortisone with bupivacaine (C), Local corticosteroid injections (B), Surgery after at least 6 months of conservative treatment with failure to show signs of improvement (at least 3 months in unusual circumstances) (I)

No Recommendation: Botulinum toxin injection (I), Massage (I), Friction massage (I), Soft tissue mobilization (I), Biofeedback (I), TENS (I), Electrical stimulation (I), Magnets (I), Diathermy (I), Manipulation (I)

Not Recommended: Extracorporeal shock wave therapy (A), Low level laser therapy (A), Phonophoresis (C), Autologous blood injections (I), Opioids (other than acute, severe conditions) (I)

Elbow Disorder: Medial Epicondylalgia (Medial Epicondylitis)

Recommended: Acetaminophen (I), Aspirin (I), Heat or cold packs (I), Topical NSAIDs (B), Oral NSAIDs (B), Home exercise (I), Epicondylalgia supports (I), Ultrasound (B), Acupuncture, Activity modification (I), Workstation modification (I), Iontophoresis (C), Corticosteroid injections (B), Surgery after at least 6 months of conservative treatment with failure to show signs of improvement (at least 3 months in unusual circumstances) (I)

No Recommendation: Botulinum toxin injection (I), Massage (I), Friction massage (I), Soft tissue mobilization (I), Biofeedback (I), TENS (I), Electrical stimulation (I), Magnets (I), Diathermy (I), Manipulation (I)

Not Recommended: Extracorporeal shock wave therapy (A), Low level laser therapy (A), Phonophoresis (C), Autologous blood injections (I), Opioids (other than acute, severe conditions) (I)

Elbow Disorder: Biceps Rupture

Recommended: Surgery (I)

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 11 – Forearm, Wrist and Hand Complaints

Table 11-7 Summary of Recommendation for Evaluating and Managing Forearm, Wrist, and Hand Complaints

Clinical Measure: Medication

Recommended: Acetaminophen (C), NSAIDs (B)

Optional: Opioids, short course (C), Rarely corticosteroids (C)

Not Recommended: Use of opioids for more than 2 weeks (C)

Clinical Measure: Physical treatment methods

Recommendation: Instructions for home exercises

Optional: At-home applications of heat or cold packs (D)

Not Recommended: Passive modalities, TENS units (C), Biofeedback (D)

Clinical Measure: Injections

Recommended: Injection of corticosteroids into carpal tunnel in mild or moderate cases of CTS after trial of splinting and medication (C), Initial injection into tendon sheath for clearly diagnosed cases of DeQuervain’s syndrome, tenosynovitis, or trigger finger (D)

Optional: Initial injection of corticosteroids in moderate cases of tendonitis (D)

Not Recommended: Repeated or frequent injection of corticosteroids into carpal tunnel, tendon sheaths, ganglia, etc. (D)

Clinical Measure: Rest and immobilization

Recommended: Splinting as first-line conservative treatment for CTS, DeQuervain’s, strains, etc. (C)

Optional: Prolonged splinting (leads to weakness and stiffness) (D), Prolonged post-operative splinting (C)

Clinical Measure: Detection of neurologic abnormalities

Recommended: NCV for median (B) or ulnar (C) impingement at the wrist after failure of conservative treatment

Not Recommended: Routine use of NCV or EMG in diagnostic evaluation of nerve entrapment or screening in patients w/o symptoms (D), Use of vibrometry for screening (C)

Clinical Measure: Radiography

Recommended: Plain films for suspected scaphoid fractures, repeat films in 7-10 days (D)

Optional: Limited bone scans to detect fractures if clinical suspicion exists (C)

Not Recommended: Routine use for evaluation of forearm, wrist, and hand (D)

Clinical Measure: Other imaging procedures

Optional: Use of arthrography, MRI, or CT scans prior to history and physical examination by a qualified specialist (D)

Clinical Measure: Surgical considerations

Recommended: Early surgical intervention for severe CTS confirmed by NCV may be indicated (B)

Tendinitis (DeQuervain’s), ganglion, or trigger finger: referral to surgeon only after patient education and conservative treatment, including splinting and injection, have failed (C, D)

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 12 – Low Back Complaints

Physical Methods

There is good quality medical literature demonstrating that radiofrequency neurotomy of facet joint nerves in the cervical spine provides good temporary relief of pain. Similar quality literature does not exist regarding the same procedure in the lumbar region. Lumbar facet neurotomies reportedly produce mixed results. Facet neurotomies should be performed only after appropriate investigations involving controlled differential dorsal ramus medial branch diagnostic blocks.

Surgical Considerations

A. Lumbosacral Nerve Root Decompression

Given the extremely low level of evidence available for artificial disk replacement or percutaneous endoscopic laser discectomy (PELD), it is recommended that these procedures be regarded as experimental at this time.

Table 12-8 Summary of Recommendations for Evaluating and Managing Low Back Complaints

Clinical Measures: Medication

Recommended: Acetaminophen (C), NSAIDs (B)

Optional: Opioids, short course (C), Muscle relaxant (C), Phenylbutazone (C)

Not Recommended: Using opioids for more than 2 weeks (C), Oral corticosteroids (C), Colchicine (B), Antidepressants (C)

Clinical Measure: Physical treatment methods

Recommended: Manipulation of low back during first month of symptoms without radiculopathy (C)

Optional: Manipulation for patients with radiculopathy (C), Relaxation techniques (D), At-home applications of local heat or cold to low back (D), shoe insoles (C), in occupational setting, corset for prevention (C)

Not Recommended: Manipulation for patients with undiagnosed neurologic deficits (D), Prolonged course of manipulation (longer than 4 weeks) (D), Traction (B), TENS (C), Biofeedback (C), Shoe lifts (D), Corset for treatment (D)

Clinical Measure: Injections

Optional: Epidural corticosteroid injections for radicular pain, to avoid surgery (C), Needle acupuncture (D)

Not Recommended: epidural injections for back pain without radiculopathy (D), Trigger-point injections (C), Facet-joint injections (C)

Clinical Measure: Detection of physiologic abnormalities

Recommended: If no improvement after 1 month, consider: Bone scan (C), Needle EMG and H-reflex tests to clarify nerve root dysfunction (C), SEPs to assess spinal stenosis (C)

Not Recommended: EMG for clinically obvious radiculopathy (D), Surface EMG and F-wave tests (C), Thermography (C)

Clinical Measure: Radiographs of lumbosacral spine

Recommended: When red flags for fracture are present (C), When red flags for cancer or infection are present (C)

Not Recommended: Routine use during first month of symptoms in absence of red flags (B), Routine oblique views (B)

Clinical Measure: Imaging

Recommended: CT or MRI when cauda equina, tumor, infection, or fracture are strongly suspected and plain film radiographs are negative (C), MRI test of choice for patients with prior back surgery (D), Assure quality criteria for imaging tests (B)

Optional: Myelography or CT myelography for preoperative planning if MRI is unavailable (D), MR neurography (D)

Not Recommended: Using imaging test before 1 month in absence of red flags (B), Discography or CT discography (C)

Clinical Measure: Surgical considerations

Recommended: Discuss surgical options with patients with persistent and severe sciatica and clinical evidence of nerve root compromise if symptoms persist after 4-6 weeks of conservative therapy (B), Standard Discectomy or microdiscectomy for herniated disk (procedures have similar efficacy) (B)

Optional: Chymopapain, used after ruling out allergic sensitivity, acceptable but less efficacious than Discectomy to treat herniated disk (C)

Not Recommended: Disk surgery in patients with back pain alone, no red flags, and no nerve root compression (D), Surgery for spinal stenosis when justified by imaging test rather than patient’s functional status (D), Spinal fusion in the absence of fracture, dislocation, complications of tumor, or infection (C)

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 13 – Knee Complaints

Table 13-6 Summary of Recommendation for Evaluating and Managing Knee Complaints

Clinical measure: Medication

Recommended: Acetaminophen, Aspirin (C, D)

Optional: Opioids for severe pain, NSAIDs (C, D)

Not Recommended: Use of opioids for more than 2 weeks (C, D)

Clinical Measure: Physical treatment methods

Recommended: Non-operative rehabilitation for medial collateral ligament injuries (C, D), Short postoperative rehabilitation for ACL repair prior to home exercise program (D), Conservative treatment for selected ruptures of the ACL (D), Exercise for cases of anterior knee pain or ligament strain (D)

Not Recommended: Passive modalities without exercise program (D), Manipulation

Clinical Measure: Aspirations and injections

Recommendation: Aspirations of tense acute effusions (D), Aspirations of tense prepatellar bursa (D)

Optional: Repeated aspirations or corticosteroids injections (D)

Not Recommended: Aspirations through infected area (D)

Clinical Measure: Rest and immobilization  
Recommended: Short period of immobilization after an acute injury to relieve symptoms (C)

Optional: Functional bracing as part of a rehabilitation program (D)

Not Recommended: Prophylactic braces (D), Prolonged bracing for ACL deficient knee (D)

Clinical Measure: Detection of neurologic abnormalities

Not Recommended: Electrical studies (contraindicated for nearly all knee injury diagnoses) (D)

Clinical Measure: Radiography

Recommended: Plain-film radiographs for suspected red flags (C)

Optional: Plain-film radiographs for tense hemarthroses (C)

Not Recommended: Routine radiographic film for most knee complaints or injuries (C)

Special Studies and Diagnostic and Treatment Considerations

Special studies are not needed to evaluate most knee complaints until after a period of conservative care and observation.

Clinical Measure: Imaging

Recommended: MRI study to determine extent of ACL tear preoperatively (C)

Not Recommended: MRI for ligament collateral tears (C)

Clinical Measure: Surgical considerations

Recommended: Arthroscopic meniscectomy or repair for severe mechanical symptoms and signs or serious activity limitations if MRI findings are consistent for meniscal tear (C, D), ACL repair for symptomatic instability (i.e., serious activity limitation) if results of Lachman and pivot-shift tests and MRI are positive (C, D)

Optional: ACL reconstruction before rehabilitation has been attempted (C, D)

Not Recommended: Surgical repair of isolated MCL ruptures (D)

Immediate surgical reconstruction of all ACL tears on basis of MRI findings without physical findings confirming diagnosis or worker life demands requiring high knee performance (D)

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 14 – Ankle and Foot Complaints

Special Studies and Diagnostic and Treatment Considerations

For most cases presenting with true foot and ankle disorders, special studies are usually not needed until after a period of conservative care and observation. Most ankle and foot problems improve quickly once any red-flag issues are ruled out. Routine testing, i.e., laboratory tests, plain-film radiographs of the foot or ankle, and special imaging studies are not recommended during the first month of activity limitation, except when a red flag noted on history or examination raises suspicion of a dangerous foot or ankle condition or of referred pain.

Table 14-6 Summary of Recommendation for Evaluating and Managing Ankle and Foot Complaints

Clinical Measure: Medication

Recommended: Acetaminophen (C), NSAIDs (B)

Optional: Opioids, short course (C), NSAID creams (D)

Recommended: Use of opioids for more than 2 weeks (C)

Clinical Measure: Injections

Recommended: For patients with point tenderness in the area of a heel spur, plantar fasciitis, or Morton’s neuroma, local injection of lidocaine and cortisone solution (D)

Not Recommended: Repeated or frequent injections (D)

Clinical Measure: Physical treatment methods

Recommended: For acute injuries, at-home ice applications, range-of-motion and strengthening exercises, as taught by primary provider (D)

Optional: Pneumatic or pulse devices to reduce swelling (C), ESWT for plantar fasciitis (C), Coupled electrical stimulation or impulse compression for fracture (C)

Not Recommended: Passive physical therapy modalities, except as initial aid prior to home exercises (D), Laser treatment (B)

Clinical Measure: Rest and immobilization (e.g., braces, supports)

Recommended: For acute injuries, immobilization and weight bearing as tolerated; taping or bracing later to avoid exacerbation or for prevention (C), For acute swelling, rest and elevation (D), For appropriate diagnoses, rigid orthotics, metatarsal bars, heel donut, toe separator (C)

Optional: Tension night splints for plantar fasciitis (B)

Not Recommended: Prolonged supports or bracing without exercise (due to risk of debilitation) (D)

Clinical Measure: Detection of physiologic abnormalities

Not Recommended: Electrical studies for routine foot and ankle problems without clinical evidence of tarsal tunnel syndrome or other entrapment neuropathies (D)

Clinical Measure: Radiography

Recommended: Plain-film radiographs only for patients with acute ankle injuries who have signs identified in Ottawa Criteria ankle rules (B), further evaluation if radiographic films show ankle effusion > 13 mm anteriorly (C)

Not Recommended: Routine plain-film radiographs for ankle injuries (B), Routine radiographic films for soft tissue diagnoses (D)

Clinical Measure: Surgical considerations

Recommended: Bunionectomy if conservative treatment fails and radiographs are positive for > 14-degree intermetatarsal angle (D), Excision of neuroma if conservative treatment (injections, toe separator) fails (D), Reconstruction of lateral ankle ligament for symptomatic patients with ankle laxity demonstrated on physical exam and positive stress films (C)

Not Recommended: Diagnostic arthroscopy of ankle if diagnosis obtainable by other non-invasive method (D), Arthroscopy of ankle for synovial impingement before conservative care, including injections, is tried (D)

American College of Occupational and Environmental Medicine, 2nd Edition

Chapter 15 – Stress-related Conditions

Referral

Specialty referral may be necessary when patients have significant psychopathology or serious medical comorbidities. Some mental illnesses are chronic conditions, so establishing a good working relationship with the patient may facilitate a referral or the return‑to‑work process. Treating specific psychiatric diagnoses are described in other practice guidelines and texts.

It is recognized that primary care physicians and other nonpsychological specialists commonly deal with and try to treat psychiatric conditions. It is recommended that serious conditions such as severe depression and schizophrenia be referred to a specialist, while common psychiatric conditions, such as mild depression, are referred to a specialist after symptoms continue for more than six to eight weeks. The practitioner should use his or her best professional judgment in determining the type of specialist. Issues regarding work stress and person‑job fit may be handled effectively with talk therapy through a psychologist or other mental health professional. Patients with more serious conditions may need a referral to a psychiatrist for medicine therapy.