

How to Diagnose, Treat Four Common Conditions

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — As a family physician trained in sports medicine, Dr. Anthony Beutler encounters many primary care providers who struggle with diagnosis and treatment of musculoskeletal conditions.

"Many times we make the right diagnosis but the patient doesn't get better because we're not addressing the underlying problem," said Dr. Beutler, chief of the Injury Prevention Research Laboratory at the Uniformed Services University of the Health Sciences, Bethesda, Md.



At the annual meeting of the American Academy of Family Physicians, Dr. Beutler discussed how to diagnose and treat four musculoskeletal conditions.

► **Plantar fasciitis.** This condition is the most common cause of heel pain; it affects about 2 million Americans a year, including 10% of all runners. It is marked by microtears of the plantar fascial aponeurosis, which lead to collagen degeneration and pain, said Dr. Beutler, also of family medicine at the university.

A key diagnostic clue is maximal tenderness at the medial tubercle of the calcaneus. Other clues include heel pain that is worst with the first step in the morning or a dull ache in the heel with activity.

Common causes include muscle weakness, training error, overpronation, improper footwear, and tight heel cords. Dr. Beutler noted that 70% of people with plantar fasciitis have gastrocnemius or soleus inflexibility and cannot passively dorsiflex past 0 degrees.

Heel spurs in this patient population may or may not indicate that plantar fasci-

itis is causing heel pain. The spurs are not the pain source.

First-line treatments include heel cord and plantar fascia stretching; foot strengthening exercises; orthotics for those with pes planus or overpronation; and ice, compression, and elevation for pain relief.

Second-line treatments include steroid injections for short-term pain relief, night splints, and, for pain that lasts more than 6 months, custom orthotics and surgery. Patients should be referred for surgery only after 6-12 months of treatment failure.

Dr. Beutler emphasized that there are no studies to support or refute the benefit of NSAIDs for pain relief. Ultrasound, laser therapy, and magnetic insoles have been found to be of no benefit.

He advised that patients continue activities at 50% of preinjury level and, when pain begins to improve, that they increase activity no more than 10% per week.

► **Ankle sprain.** This ranks as a chief reason for a visit to the emergency room. The lateral ankle is most commonly affected, usually because of injury to the anterior talofibular ligament. The calcaneofibular ligament and posterior talofibular ligament are less commonly injured.

Recommended treatments include rest, ice, compression, elevation, NSAIDs, and a semirigid brace to improve weight-bearing and reduce the risk of reinjury. "Braces are proven. They will decrease your rate of injury for up to 8 months after you injure your ankle."

Another key component involves rehabilitation exercises, such as sitting in a chair and "writing" each letter of the alphabet with your toes to improve range of motion,

or doing the single-leg balance to help the ankle regain its sense of position or proprioception. Do several repetitions on each foot at least twice daily. Patients should return in 4-6 weeks if they are not better.

► **Patellofemoral pain.** This condition is the most common cause of knee pain in patients aged less than 40 years. It is marked by biomechanical imbalance that causes pain in peripatellar structures. Possible pain generators include the anterior synovium, infrapatellar fat pad, subchondral bone, or retinacula.

The pain is often bilateral and is exacerbated by going up and down stairs. Effusion and erythema are rare.

Common culprits include muscle tightness, weakness of quadriceps and gluteus medius, and bony malalignment.

Consider referral to a physical therapist who focuses on stretching or strengthening exercises, such as single-leg squats and single-leg step downs. If the patient comes back to you having been treated "with ice, heat, fancy gels, and no real stretching or

strengthening program, don't waste your time on that therapist any more."

NSAIDs "are not great for femoral pain" but may provide short-term relief, he said. Orthotics or patellar taping and bracing "work very well for a very few patients."

► **Trochanteric bursitis.** This condition is the second only to osteoarthritis as a chief cause of hip pain. Tightness in the iliotibial band and weakness in the gluteus medius cause compression of the bursa between the tensor fascia latae and the greater trochanter. Patients who present with trochanteric bursitis describe it as lateral hip pain radiating toward the knee and report that it's painful to get up out of a chair. The feeling ranges from nagging pain to pain so severe they're unable to walk. Most evidence supports a steroid and lidocaine injection into the trochanteric bursa as a first-line treatment. No studies to date compare NSAIDs with steroid injection and other forms of treatment. Single-leg step downs, lateral leg lifts, and hula girl exercises improve strength. ■

Many times the right diagnosis is made, but the patient doesn't get better because of unaddressed underlying issues.

DR. BEUTLER

Musculoskeletal Coding Dos and Don'ts

Dr. Beutler shared the following tips for getting paid:

► **Do capture the time you spend.**

Brace fitting and care coordination can be included in the patient education or complexity sections of your E&M code. Crutch training can be coded as CPT 97116 or included in your E&M code. Fifteen minutes of exercise teaching can be coded as CPT 97110; smaller amounts of time can be included in your E&M code.

► **Don't forget to code injections.**

Use CPT 20610 for most injections. Finger joints are 20600.

► **Do use a 29 modifier.** "If you diagnose subacromial shoulder pain and do

a subacromial joint injection at the same visit, use a 29 modifier with your CPT code of 20610," he said. "This tells the insurance company that you both diagnosed the subacromial pain and did the injection at the same visit."

► **Don't forget to bill for durable medical goods.** If you provide the braces or the crutches, make sure that shows up on your billing.

► **Do phone a friend.** Phone your orthopedic office or referral center and ask them who does their orthopedic billing and coding. Find that person and take them out to lunch to talk coding, Dr. Beutler advised. "It will be well worth your time."

Twisted Legs, Bent Knees Call for 'Orthopedic Psychotherapy'

BY SHERRY BOSCHERT
San Francisco Bureau

STANFORD, CALIF. — The most common complaints from parents about a child's musculoskeletal condition stem from usually benign causes that don't need treatment, but addressing them can help alleviate anxiety.

Listen to the parents and acknowledge their concerns, advised Dr. James G. Gamble, professor of orthopedic surgery at Stanford (Calif.) University.

After examining the child, educate the parents about the rotational or angular conditions you find in the child's legs and feet, and get parents actively involved in stretching or massaging the child's limbs, he suggested at a pediatric update sponsored by the university.

He calls this approach OP, for

orthopedic psychotherapy.

Recognizing the difference between physiological and pathological conditions of the hips, knees, legs, and feet will let physicians know when to refer to a specialist and when to handle parental complaints. Dr. Gamble reviewed the most common rotational and angular conditions in children that raise concerns about the feet, legs, and knees:

► **Pigeon toes.** Scientifically called metatarsus adductus, this condition presents between birth and 6 months of age, typically as a foot with a concave medial border, a convex lateral border, and a deep plantar crease. Also known as "kidney bean foot," it can be confused with clubfoot.

Looking at the bottom of the foot, imagine the heel as an oval, and bisect it with an imaginary line that extends up toward the

toes. On a normal foot, the line would bisect the gap between the second and third toes. The more the line is toward the last little toe, the more severe the metatarsus adductus.

Check to see if the foot is rigid or supple, because rigidity can be a sign of skewfoot and may require surgery. Finally, check ankle range of motion; limited dorsal flexion may indicate clubfoot or other problems that might need surgery, he said. Also, check the hips, because children with metatarsus adductus have an increased incidence of dislocation.

Refer patients with foot rigidity, limited dorsiflexion at the ankle, or extremely anxious parents to an orthopedic surgeon.

For metatarsus adductus alone, treatment starts with OP and stretching. Casting may help if there's rigidity. Splints or special

shoes are an option, but there's no good evidence that any of these change the natural history.

► **Tibial torsion.** Look at the backs of the legs and feet as the child is prone or on a parent's lap, and if the foot is internally rotated or (less commonly) externally rotated, the child has internal or external tibial torsion (also called tibial rotation or version). This is typically seen between 6 months and 3 years of age.

The mainstays of treatment are OP and benign neglect, Dr. Gamble said. Very rarely would he consider surgery or orthotics, and then only in cases of neuromuscular problems such as spina bifida or cerebral palsy or trauma.

► **Bowlegs or knock-knees.** Parents typically get concerned about bowlegs or knock-knees (genu varum or genu valgum) when infants begin to stand and

cruise. These conditions typically present between 6 months and 3 years of age.

To differentiate bowlegs from internal tibial torsion, have the child placed supine or sitting with knees in extension. Place the patella in a neutral position and cover the lower leg and foot with your hand. If you see no bowing in the tibial-femoral angle, but when you look under your hand, the foot is turned in about 70 degrees from the distal leg, the condition is not at the knee; it's at the tibia. This is tibial torsion, not genu varum.

If the legs are more angled than bowed, consider the possibility of rickets, vitamin D deficiency, or Blount disease. Referral for an x-ray is warranted only if the condition is unilateral or rapidly progressing, or the patient has asymmetric leg length or a limp. ■