H. LOCAL SYNDROMES OF THE LOWER LIMBS GROUP

XXXI: LOCAL SYNDROMES IN THE LEG OR FOOT: PAIN OF NEUROLOGICAL ORIGIN

Lateral Femoral Cutaneous Neuropathy (Meralgia Paresthetica) (XXXI-I)

Definition
Hypoesthesia and painful dysesthesia in the distribution of the lateral femoral cutaneous nerve.

Site
Upper anterolateral thigh.

System
Peripheral nervous system.

Main Features
Prevalence: more common in middle age, males slightly more often than females. Associated with obesity, pregnancy, trauma to inguinal region, diabetes mellitus, and possibly other factors. Pain Quality: all complaints are of pain or related sensations in the upper anterolateral thigh region; patients may describe burning, tingling, aching, numbness, hypersensitivity to touch, or just vague discomfort. Time Pattern: usually gradually abates over months to years without specific therapy.

Signs
Hypoesthesia and paresthesia in upper anterolateral thigh; occasionally tenderness over lateral femoral cutaneous nerve as it passes through iliacus fascia under inguinal ligament.

Relief
Reassurance is the first step. If pelvic tilt is a factor, it should be compensated with heel lift. Diabetes or any other systemic disease will be treated appropriately. In obese patients, the pain will benefit from loss of weight. Surgical decompression of the lateral femoral cutaneous nerve as it passes under the inguinal ligament is, on rare occasions, helpful in the patient who has failed conservative therapy.

Essential Features
Hypoesthesia and paresthesia in upper anterolateral thigh.

Differential Diagnosis
Radiculopathy of L2 or L3; upper lumbosacral plexus lesion due to infection or tumor; entrapment of superior gluteal nerve (piriformis syndrome); arthropathy of hip or rarely the knee.

Code
602.X I a

Obturator Neuralgia (XXXI-2)

Definition
Pain in the distribution of the obturator nerve.

**Site**
Groin and medial thigh as far distal as the knee; usually unilateral.

**System**
Peripheral nervous system.

**Main Features**
Constant pain in the groin and medial thigh; there may be sensory loss in medial thigh and weakness in thigh adductor muscles. Indefinite persistence if cause not treated.

**Associated Symptoms**
If secondary to obturator hernia, pain is increased by an increase in intra-abdominal pressure. If secondary to osteitis pubis, pain is increased by walking or hip motions. May be tender in region of obturator canal.

**Signs**
Hypoesthesia of medial thigh region, weakness and atrophy in adductor muscles.

**Laboratory Findings**
If the neuropathy is severe, there may be EMG evidence of denervation in the adductor muscles of the thigh.

**Usual Course**
Constant aching pain that persists unless the cause is treated successfully.

**Complications**
Progressive loss of sensory and motor functions in obturator nerve.

**Social and Physical Disability**
When severe, may impede ambulation and physical activity involving hip.

**Pathology**
Obturator hernia; osteitis pubis, often secondary to lower urinary tract infection or surgery; lateral pelvic neoplasm encroaching on nerve.

**Essential Features**
Pain in groin and medial thigh; with time the development of sensory and motor changes in obturator nerve distribution.

**Differential Diagnosis**
Tumor or inflammation involving L2-L4 roots, psoas muscle, pelvic side wall. Hip arthropathy.

**Code**
602.X6a Obturator hernia
602.X1b Surgery
602.X2a Inflammation
602.X4a Neoplasm

**Femoral Neuralgia (XXXI-3)**
**Definition**
Pain in the distribution of the femoral nerve.

**Site**
Anterior surface of thigh, anteromedial surface of leg, medial aspect of foot to base of first toe.

**System**
Peripheral nervous system.

**Main Features**
Constant aching pain in anterior thigh, knee, medial leg, and foot. The pain may involve only a portion of the sensory field due to pathology in only one branch of the nerve. There may be sensory loss in similar areas and weakness of the quadriceps femoris, sartorius, and associated hip flexor muscles.

**Associated Symptoms**
If the disorder is secondary to femoral hernia, pain is increased by increase in intra-abdominal pressure. Trauma to the saphenous nerve may result in an isolated sensory deficit in the knee or leg with local pain.

**Signs**
Hypoesthesia in anterior thigh, medial leg, and foot or portion thereof; weakness and atrophy in sartorius or quadriceps femoris muscles if lesion proximal to upper thigh. There may be local tenderness at the site of nerve injury.

**Laboratory Findings**
If the neuropathy is severe, there may be EMG evidence of denervation in sartorius and quadriceps femoris muscles.

**Usual Course**
Constant aching pain which persists unless cause is successfully treated.

**Complications**
Progressive sensory and motor loss in femoral nerve or its branches depending upon site of lesion.

**Social and Physical Disability**
Major gait disturbance if quadriceps femoris is paretic.

**Pathology**
Trauma to femoral nerve or its branches; femoral hernia.

**Essential Features**
Pain, weakness, and sensory loss in the distribution of the femoral nerve or its branches.

**Differential Diagnosis**
Neoplasm or infection impinging upon femoral nerve, L2-L4 roots, psoas muscle, or pelvic sidewall. Hip or knee arthropathy.

**Code**
602.X2b  Inflammation
602.X4b  Neoplasm
602.X6b  Arthropathy
Sciatica Neuralgia (XXXI-4)

Definition
Pain in the distribution of the sciatic nerve due to pathology of the nerve itself.

Site
Lower extremity; may vary from gluteal crease to toes depending upon level of nerve injury.

System
Peripheral nervous system.

Main Features
Continuous or lancinating pain or both, referred to the region innervated by the damaged portion of the nerve; exacerbated by manipulation or palpation of the involved segment of the sciatic nerve.

Associated Symptoms
Weakness and sensory loss in muscles and other tissues innervated by the damaged portion of the nerve; secondary changes due to denervation if there is major injury to the nerve.

Signs
Sensory loss; weakness, atrophy, and reduced reflexes in denervated muscles.

Laboratory Findings
Electromyographic and nerve conduction studies document nerve damage; roentgenograms or CT scans may reveal lesion causing nerve damage.

Usual Course
If a progressing lesion is the cause of the pain, the patient will have an increasing neurological deficit and pain may decrease. If a static intraneural lesion is the cause of the pain, the neurological deficit is fixed and pain is likely to persist indefinitely.

Relief
Remove offending lesion impinging upon nerve.

Complications
Progressive neurological deficit in the territory of the involved nerve.

Social and Physical Disability
Severe pain can preclude normal daily activities; a variable loss of function occurs due to nerve damage.

Pathology
Varying degrees of myelin and axonal damage within nerve. Compression of the sciatic nerve by the piriformis muscle can be a cause. The actual cause of the pain is unknown.

Essential Features
Pain in the distribution of the damaged nerve.

Differential Diagnosis
Myelopathy, radiculopathy, lumbosacral plexus lesion involving L4-S 1 segments.

Code
Interdigital Neuralgia of the Foot (Morton’s Metatarsalgia) (XXXI-5)

Definition
Pain in the metatarsal region.

Site
Usually in the area of the third and fourth metatarsal heads.

System
Peripheral nervous system.

Main Features
Constant aching pain, often lancinating; often worse at night or during exercise; perceived in the region of the metatarsal head. Most commonly involves third and fourth metatarsals.

Signs
Hypoesthesia of opposing surface of adjacent toes; focal tenderness between metatarsal heads when palpated.

Laboratory Tests
None

Usual Course
Pain initially when walking, relieved by rest. Progressively severe and frequent lancinating pain in the toes associated with constant metatarsal ache. May follow local trauma. Some cases spontaneously remit. Often associated with abnormal postures (narrow shoes or high heels) or deformities of the foot and alleviated by treatment of causative condition.

Relief
Orthotic devices to force plantar flexion, i.e., metatarsal bars or pads; local infiltration of steroids with local anesthetic; when conservative therapy fails, incision of transverse metatarsal ligament and excision of interdigital neuroma.

Pathology
Compression of interdigital nerve by metatarsal heads and transverse metatarsal ligament; development of interdigital neuroma.

Essential Features
Pain in region of metatarsal heads exacerbated by weight-bearing.

Differential Diagnosis
Sciatic or peroneal neuropathy, plantar fasciitis, metatarsal pathology, such as inflammation, march fracture, or osteoporosis of metatarsal head, Freiberg’s infraction.

Code
603.X1d

Injection Neuropathy (XXXI-6)

Code
Gluteal Syndromes (XXXI-7)

Definition
Aching myofascial pain arising from trigger points located in one of the three gluteal muscles.

Site
Gluteus maximus, medius, or minimus muscles.

System
Musculoskeletal system.

Main Features
Aching pain related to the gluteal muscles according to the following patterns. *Gluteus Maximus*: Trigger points in this muscle may refer pain to any part of the buttock or coccyx areas. *Gluteus Medius*: Trigger points in this muscle refer pain medially over the sacrum, laterally along the iliac crest, and occasionally downward to the mid-buttock level and upper portion of the posterior thigh. Sometimes it travels far down into the calf. When this occurs it mimics the pain pattern of “sciatica.” *Gluteus Minimus*: Trigger points may arise in either the posterior or superior aspects of this muscle. Those in the posterior portion refer pain downward into the lower part of the buttock, the posterior part of the thigh, and rarely to the posterior part of the calf. The knee joint is spared in this distribution. Again, this pattern is similar to that of sciatica and also of other low back pain conditions involving the gluteal musculature. Trigger points located in the anterior portion refer pain similarly except that it is distributed along the lateral rather than posterior aspect of the thigh and calf.

Aggravating Factors
A foot with a long second and short first metatarsal bone. It can act as a perpetuating factor for all the gluteal muscles, especially the gluteus medius.

Signs
Pressure on the responsible trigger point will reproduce the referred pain pattern. Straight leg raising is usually restricted because of tightness in the hamstring and gluteus maximus muscles.

Pathology
See myofascial pain syndromes.

Etiology
Trigger points of the gluteal musculature very often function as satellite trigger points of those located in the quadratus lumborum muscle.

Differential Diagnosis
Sacroiliac joint dysfunction, sciatic neuritis, piriformis syndrome.

Code
632.X1e

Piriformis Syndrome (XXXI-8)

Definition
Pain in the buttock and posterior thigh due to myofascial injury of the piriformis muscle itself or dysfunction of the sacroiliac joint or pain in the posterior leg and foot, groin, and perineum due to
entrapment of the sciatic or other nerves by the piriformis muscle within the greater sciatic foramen, or a combination of these causes.

**Site**
Buttock from sacrum to greater femoral trochanter with or without posterior thigh, leg, foot, groin, or perineum.

**System**
Musculoskeletal system.

**Main Features**
*Sex Ratio:* female to male 6:1. *Onset:* often occurs after severe or low grade chronic trauma in which the thigh medially rotates on the torso (stretching the piriformis) or in which the piriformis prevents excessive medial rotation by acting as a lateral rotator of the thigh during twisting and bending movements. The patient is often not aware of the injury until hours or days after the incident. Symptoms are particularly aggravated by sitting (which places pressure on the piriformis muscle) and by activity. Placing the hip in external rotation may decrease pain. *Course:* without appropriate intervention, persistent pain. Shortening of the piriformis muscle may occur, resulting in a lateral rotation contracture of the hip.

**Associated Symptoms**
Paresthesias in the same distribution as the pain; other myofascial pain syndromes in synergists of the piriformis muscle: iliopsoas, gluteus minimus, gluteus medius, tensor fascia lata, inferior and superior gemelli, obturator internus, as well as levator ani and coccygeus; dyspareunia, pain on passing constipated stool, impotence.

**Signs**
On external palpation through a relaxed gluteus maximus: buttock tenderness, medial and lateral piriformis trigger points, and frequently a myofascial taut band extending from sacrum to femoral greater trochanter. On internal palpation during rectal or vaginal examination: piriformis muscle tenderness and firmness (medial trigger point) on posterior palpation of the piriformis muscle on either side of the coccyx. Reproduction of buttock pain with stretching the piriformis muscle during hip flexion, abduction, and internal rotation while lying supine. Painful hip abduction against resistance while sitting (Pace Abduction Test). Leg length discrepancy. Weakness of hip abductors on the affected side. Sacroiliac dysfunction. Lateral rotation contracture of the hip.

**Laboratory Findings**
X-rays of lumbosacral spine, sacroiliac joints, hip joints, and pelvis usually normal or have unrelated findings. Bone scan (Tc-99m methylene diphosphonate) is usually normal but has been reported to show increased piriformis muscle uptake acutely. MRI may show atrophy of the piriformis muscle. Selected nerve conduction studies may demonstrate nerve entrapment.

**Usual Course**
Persistent pain without appropriate intervention. Responds well to appropriate interventions, particularly in the early stages.

**Relief**
Correction of biomechanical factors (leg length discrepancy, hip abductor or lateral rotator weakness, etc.). Prolonged stretching of piriformis muscle using hip flexion, abduction, and internal rotation. Facilitation of stretching by: reciprocal inhibition and postisometric relaxation techniques; massage; acupressure (ischemic compression) to trigger points within piriformis muscle; intermittent cold (ice or fluorimethane spray); heat modalities (short wave diathermy or ultrasound). Injection (steroid,
procaine/Xylocaine) to region of lateral attachment of piriformis on femoral greater trochanter (lateral trigger point), or to tender areas medial to sciatic nerve near sacrum (medial trigger point) with rectal/vaginal monitoring. If previous measures fail, surgical transection of piriformis tendon at greater trochanter with exploration of nerves and vascular structures within the greater sciatic foramen that may be entrapped by the piriformis muscle.

**Pathology**

Three main causes: (1) myofascial pain referred from trigger points in the piriformis muscle, (2) nerve and vascular entrapment by the piriformis muscle within the greater sciatic foramen, and (3) dysfunction of the sacroiliac joint. Myofascial injury to the piriformis muscle may be acute—blunt trauma, overstretch or overconstriction due to fall, motor vehicle accident, etc.—or chronic—repetitive low-grade activity, e.g., using a foot pedal with the hip in abduction while sitting. Vascular or nerve structures may be entrapped between the piriformis muscle and the rim of the greater sciatic foramen, or possibly by nerve entrapment within the muscle. Vulnerable structures include superior gluteal, inferior gluteal, and pudendal nerves and vessels; the sciatic and posterior femoral cutaneous nerves; and the nerves supplying the superior and inferior gemelli, the obturator internus, and the quadratus femoris muscles. Sacroiliac dysfunction may be due to contralateral oblique axis rotation of the sacrum with associated malalignment at the symphysis pubis.

**Social and Physical Disabilities**

Difficulty sitting for prolonged periods and difficulty with physical activities such as prolonged walking, standing, bending, lifting, or twisting compromise both sedentary and physically demanding occupations.

**Essential Features**

Buttock pain with or without thigh pain, which is aggravated by sitting or activity. Absence of low back or hip symptoms or pathology. Tenderness from sacrum to femoral greater trochanter externally. Posterolateral tenderness and firmness on rectal or vaginal examination. Aggravation by hip flexion, abduction, and internal rotation.

**Differential Diagnosis**

Lumbosacral radiculopathy, lumbar plexopathy, proximal hamstring tendinitis, ischial bursitis, trochanteric bursitis, sacroiliitis, facet syndrome, spinal stenosis (if bilateral symptoms). May occur concurrently with lumbar spine, sacroiliac, and/or hip joint pathology.

**Code**

632.Xlf

**References**


Painful Legs and Moving Toes (XXXI-9)

Definition
Deep pain, often gnawing, twisting, or aching in an extremity, with involuntary movements of the extremity, especially the digits.

Site
Pain in lower leg and foot, and sometimes toe. It may be unilateral or bilateral, or start unilaterally and spread to the other limb.

System
Nervous system. In some cases peripheral causes have been described; the spinal cord is probably also involved.

Main Features
Pain is usually severe, deep, and poorly localized. It is often described as gnawing, twisting, aching. It is more severe in the leg than in the periphery. Sometimes relieved by activity, though it may be worse following exercise. It occurs in the second half of life. The movements may be florid or almost imperceptible, and in the latter case, the patient may never have noticed them. They consist of irregular, involuntary, and sometimes writhing movement of the toes, and they cannot be imitated voluntarily. They can be suppressed for a minute or two by voluntary effort and then return when the patient no longer attends to them. There can also be movements of the feet. There is not usually a relation between the pain and the movements.

Usual Course
It continues indefinitely.

Relief
No consistently effective measures have been found.

Pathology
Precise pathology unknown, but nerve root lesions have been described, and spinal cord damage.

Code
602.X8 (See XI-5 for Painful Arms and Moving Fingers)

References

Metastatic Disease (XXXI-10)
**Definition**
Pain in the hip joint and thigh region due to tumor infiltration of bone.

**Site**
Acetabulum, head of the femur, femoral neck, and femoral shaft.

**System**
Skeletal system.

**Main Features**
Metastases to the hip joint region produce continuous aching or throbbing pain in the groin with radiation through to the buttock and down the medial thigh to the knee. The pain is made worse by movements of the hip joint and is especially severe on weight-bearing. A metastatic deposit to the femoral shaft produces local pain, which is also aggravated by weight-bearing.

**Associated Symptoms**
Pain at rest due to tumor infiltration of bone usually responds reasonably well to nonsteroidal antiinflammatory drugs and narcotic analgesics. Pain due to hip movement or weight-bearing responds poorly to analgesic agents.

**Signs and Laboratory Findings**
There may be tenderness in the groin and in the region of the greater trochanter. Internal and external rotation of the hip are especially painful. There is usually no deformity unless a pathological fracture has occurred. Plain films and bone scan may be positive.

**Complications**
The major complication is a pathological fracture of the femoral neck or the femoral shaft. This of course puts the patient to bed. Hip replacement or internal fixation of the femur produces dramatic pain relief.

**Summary of Essential Features and Diagnostic Criteria**
The essential features for disease in the hip joint are severe pain in the groin with radiation into the buttock and down the medial thigh. There is usually tenderness in the groin and increased pain on internal and external rotation. Plain films and bone scan may be positive.

**Differential Diagnosis**
The differential diagnosis includes upper lumbar plexopathy, avascular necrosis of the femoral head, and septic arthritis and radiation fibrosis of the hip joint.

**Code**
633.X4

**Peroneal Muscular Atrophy (Charcot-Marie-Tooth Disease) (XXXI-11)**

**Definition**
Pain in the limbs, usually constant and aching in the feet, in association with peroneal atrophy.

**Site**
The distal portion of the limbs, more often in the feet than in the hands, and across the joint spaces.

**System**
Peripheral nervous system.
Main Features
The pain arises in association with peroneal muscular atrophy. *Sex Ratio*: the male to female ratio is 1:1.6. *Age of Onset*: the illness normally appears in childhood and adolescence, with a reported age range for prevalence from 10-84 years. It is an inherited disorder, sometimes an autosomal dominant, sometimes an autosomal recessive, and sometimes a sex linked dominant genetic disorder. The sex linked form is less common than the other types. *Pain Quality*: pain is relatively rare in the disease, and has two patterns. The pain is usually aching in quality. It may be continuous or intermittent but is aggravated by activity, stress, cold, and damp. This aching pain appears most often as a complication of surgical foot corrections by triple arthrodesis. Pain and cramps in the muscle occasionally occur following activity. This pain is described as a burning discomfort. Anxiety and fatigue appear in association with the pain.

Signs
Features of the primary disease are evident. There is distal muscle wasting with the “classical” inverted “champagne bottle” legs. Deformity and subluxation of the distal joints occur. There are demonstrable sensory losses in a significant proportion of patients, predominantly affecting light touch and proprioception.

Usual Course
Unremitting.

Pathology
Degenerative changes appear in the dorsal root ganglion cells or motor neurons of the spinal cord with resulting axonal degeneration.

Relief
Cold, damp, and changes in the weather appear to cause an increase in the symptom. Tension, stress, fatigue, and movement all increase the pain. Rest, simple analgesics such as paracetamol (acetaminophen) and nonsteroidal anti-inflammatory drugs, and transcutaneous electrical stimulation help to ease the pain. Relief is also associated with warmth, massage, lying down, sleep, and distraction.

Laboratory Findings
Conduction velocities in motor nerves may be decreased, or denervation may be evident.

Essential Features
Pain in the relevant distribution in patients affected by the typical muscle disorder.

Code
Pain affecting joints only
203.X0
603.X0
(most often 203.60 and 603.60)

Pain affecting the belly of the muscle
205.X0
605.X0
(most often 205.60 and 605.60)

Note: Where pain affects both locations, code 203.X0 and 603.X0.
GROUP XXXII: PAIN SYNDROMES OF THE HIP AND THIGH OF MUSCULOSKELETAL ORIGIN

Ischial Bursitis (XXXII-1)

Definition
Severe, sharp, or aching pain syndrome arising from inflammatory lesion of ischial bursa.

Site
Buttock.

System
Musculoskeletal system.

Main Features
Uncommon. There is often severe sharp or aching pain while sitting or lying. With coexistent sciatic irritation, the pain may be acute, radiating in the sciatic distribution. Attacks may last weeks or months without treatment. Cases are often secondary to systemic inflammatory disease, such as ankylosing spondylitis, rheumatoid arthritis, or Reiter’s syndrome.

Signs
Tenderness deep in buttock over ischial tuberosity that reproduces the patient’s symptoms.

Relief
Injection into the ischial bursa with local anesthetic and steroid; “doughnut” cushion as used for treatment of hemorrhoids.

Complications
None.

Pathology
Inflammatory process of ischial bursa usually occurring with repeated trauma.

Essential Features
Recurring pain in ischial region aggravated by sitting or lying, relieved by injection.

Differential Diagnosis
Acute sciatica, spondylarthropathy, prostatitis.

Code 533.X3

Trochanteric Bursitis (XXXII-2)

Definition
Aching or burning pain in the high lateral part of the thigh and in the buttock caused by inflammation of the trochanteric bursa.

Site
Thigh and buttock.
System
Musculoskeletal system.

Main Features
Very common condition, especially in those over 40 years of age, marked by severe aching or burning pain usually perceived by the patient to be “in the hip” but which is localized to the high lateral thigh and low buttock, often radiating to the knee. The patient characteristically finds it impossible to sleep on the affected side. The acute episode may last weeks to months and may recur. Often associated with mild “hip” stiffness, somewhat relieved by activity.

Aggravating Factors
Aggravated by climbing stairs, extension of the back from flexion with knees straight.

Signs
Tenderness usually 2.5 cm posterior and superior to the greater trochanter that reproduces the patient’s symptoms.

Usual Course
Usually of sudden onset. The pain tends to be severe and persistent. If untreated it may last for several months. Repeated attacks occur at variable intervals.

Relief
Local infiltration of local anesthetic and steroid into the area of the greatest tenderness produces excellent pain relief.

Complications
None.

Pathology
Inflammatory process of bursa caused by repeated trauma or generalized inflammation such as rheumatoid arthritis.

Essential Features
Local pain aggravated by climbing stairs, extension of the back from flexion with knees straight.

Differential Diagnosis
Disorders of the hip joint, referred pain from diseases of lumbosacral spine.

Code 634.X3d

Osteoarthritis of the Hip (XXXII-3)

Definition
Pain due to primary or secondary degenerative process involving the hip joint.

Main Features
As for osteoarthritis. Often felt deep in the groin, some times buttock or thigh, reproduced on passive or active movement of hip joint through a range of motion. As disease progresses, range of motion declines. Other features as for osteoarthritis (I-11).
Code
63 8.X6b
GROUP XXXIII: MUSCULOSKELETAL SYNDROMES OF THE LEG

Spinal Stenosis (XXXIII-1)
See section XXVII-6.

Code
633.X6

Osteoarthritis of the Knee (XXXIII-2)

Definition
Pain due to a degenerative process of one or more of the three compartments of the knee joint.

System
Musculoskeletal system.

Main Features
As for osteoarthritis but localized to the knee. Epidemiology, aggravating and relieving features, signs, usual course, physical disability, pathology, and differential diagnosis as for osteoarthritis (I-11).

Code
638.X6c

Night Cramps (XXXIII-3)

Definition
Painful nocturnal cramps in the calves.

Site
Lower limbs.

System
Musculoskeletal system.

Main Features
Severe aching cramps in the calves of the legs, often preventing the patient from sleep or waking him or her from sleep. Nightly pain for variable intervals which recur frequently in clusters. Experienced especially by children and the elderly, but can occur at any age.

Aggravating Factors
Aggravated by prolonged walking or standing on concrete floor. May be provoked by sudden dorsiflexion of ankle or knee joint.

Relief
Walking, moving the legs, elevation of the legs, or calf stretching provide occasional relief. Treatment with quinine, calcium supplements, diphenhydramine, diphenyl hydantoin, or vitamin E (alpha-tocopherol) may be helpful.
Differential Diagnosis
Electrolyte disorder, hypothyroidism.

Code
634.X8

Plantar Fasciitis (XXXIII-4)

Definition
Pain in the foot caused by inflammation of the plantar aponeurosis.

Site
Foot.

System
Musculoskeletal system.

Main Features
Pain with insidious onset in the plantar region of the foot, especially worse when initiating walking. Worse with prolonged activity. The patient may describe shooting or burning in the heel with each step.

Signs
Tenderness along the plantar fascia when ankle is dorsi-flexed.

Radiographic Findings
Often associated with calcaneal spur when chronic.

Relief
Arch supports, local injection of corticosteroid, oral non-steroidal anti-inflammatory agents. Surgery as a last resort.

Pathology
Fifteen percent have some form of systemic rheumatic disease, usually a seronegative form of spondylarthritis.

Differential Diagnosis
Reiter’s syndrome, ankylosing spondylitis, rheumatoid arthritis, psoriatic arthritis.

Code
633.X3