

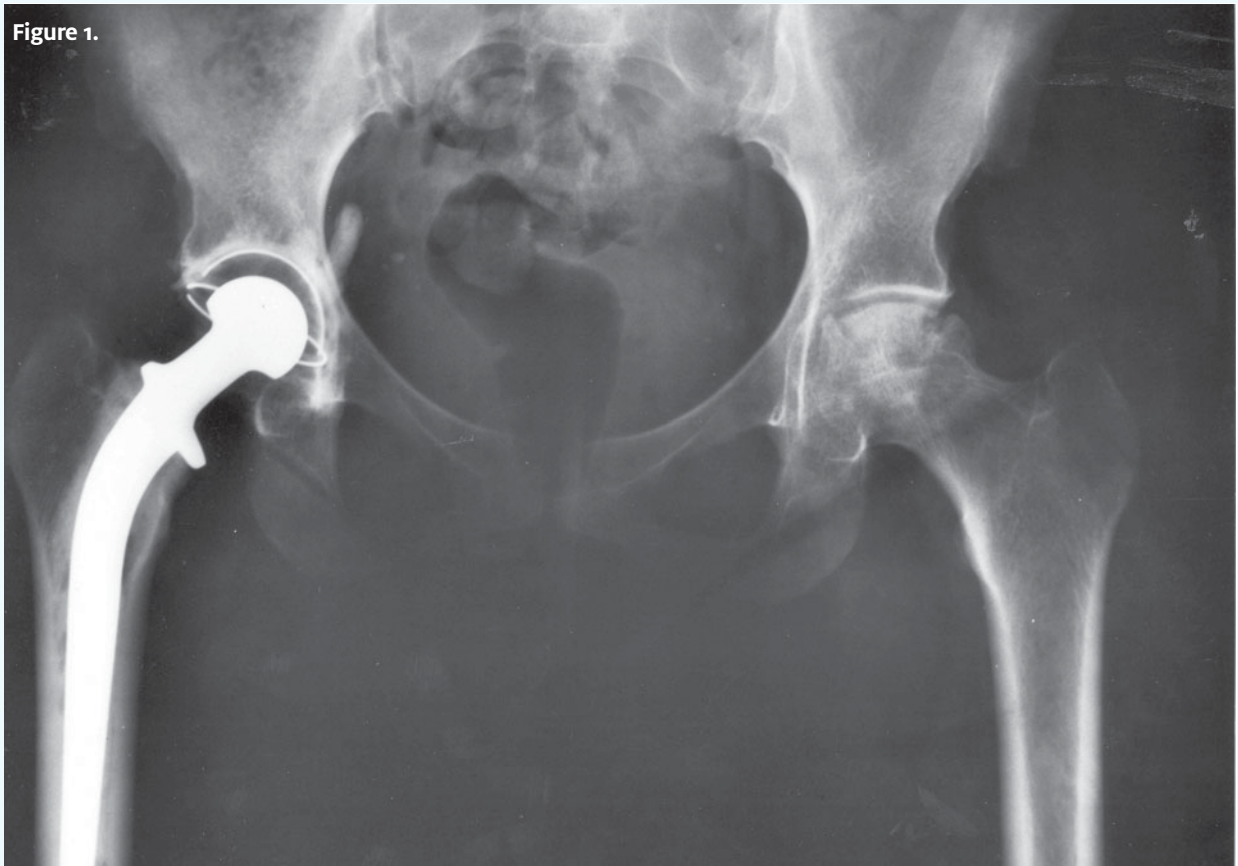


In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please email the relevant materials and presenting information to editor@juqm.com.

Hip Pain in an 80-Year-Old Woman

Figure 1.



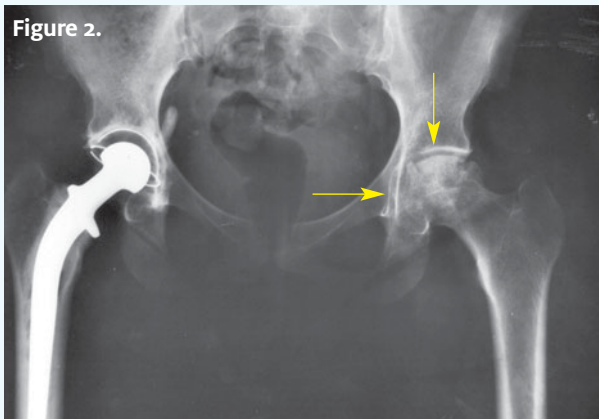
Case

An 80-year-old woman presents to an urgent care center with left hip pain that she has had for 4 years but that has worsened in the last week. She reports that before the pain worsened, she had gone on a long walk with her grandson. The pain is worse with movement through the range of motion. She has taken ibuprofen, but it did not reduce her pain. She says that she has not had any back pain or knee pain and has not fallen. She has no fever or vomiting, and no paresthesias. She has a past medical history of hypertension, for which she takes hydrochlorothiazide. She is a nonsmoker.

View the image taken (**Figure 1**) and consider what your diagnosis would be.

Resolution of the case is described on the next page.

THE RESOLUTION

**Differential Diagnosis**

- Intertrochanteric hip fracture
- Osteosarcoma
- Fracture of the inferior pubic ramus
- Hip osteoarthritis
- Subcapital hip fracture
- Septic arthritis

Physical Examination

On physical examination, her vital signs are as follows: temperature, 99.1°F (37.3°C); pulse rate, 108 beats/min; respiration rate, 20 breaths/min; blood pressure, 164/94 mm Hg; oxygen saturation, 98% on room air. She is alert and oriented, is not in acute distress, and is breathing comfortably.

Externally, her left hip appears normal, without erythema or swelling, and there are no cuts or breaks in the skin. She has moderate pain with flexion and extension of the hip, and with passive internal and external rotation through the range of motion. She has no pain with movement through the range of motion of the left knee. Her neurovascular status is intact, with a 2+ dorsalis pedis pulse, and sensation is grossly intact.

Diagnosis

An x-ray (**Figure 2**) shows arthritic changes (*arrows*) in the left hip and evidence of replacement of the right hip.

What to Look For

To differentiate between traumatic hip pain and atraumatic pain when obtaining the medical history, first evaluate the mechanism at the onset of pain. Arthritic pain will typically be chronic pain that may have been exacerbated by a specific mechanism. The pain will be worse with movement through the range of motion during weight-bearing. Inquire about ability to ambulate and activities that are limited because of pain, paresthesia, or a sensation of warmth or coolness of the extremity. The past history should include information about any past injuries, surgeries, and therapies.

When performing the physical examination, document the patient's general appearance and ability to ambulate. Inspect and palpate for skin changes such as erythema, abrasions, lacerations, fluctuance, necrosis, crepitus, and ecchymosis. Palpate for location of pain, and look for pain exacerbators such as weight-bearing and movement through the range of motion.

A plain x-ray will typically reveal arthritic changes in the hip, but clinical correlation is important. An x-ray of an arthritic hip will show joint-space narrowing, osteophytes, and subchondral sclerosis. The diagnosis requires not only x-ray findings but also symptoms typical of arthritis. Advanced imaging is not required.

Treatment

Symptom management is the initial intervention, through prescribing acetaminophen, exercise, weight loss, icing, movement through the range of motion, and physical therapy. Indications for transfer to an emergency department are as follows:

- Concern that there is a hip fracture
- Intractable pain
- Inability to exclude septic arthritis

Acknowledgment: The image for Figure 1 was produced by Connie Raab as a work of the National Institutes of Health and is in the public domain. Available from: <https://commons.wikimedia.org/w/index.php?curid=789996>. Figure 2 is an adaptation of Figure 1.



Fever, Conjunctival Injection, and a Facial Papule

Figure 1.



Case

A mother brings her 10-year-old son to an urgent care center with a fever, conjunctival injection, and pharyngitis. She points out a smooth papule on his face that developed over the last few days. She says that he played with some kittens at a friend's house about a week earlier, and she wonders if maybe he is extremely allergic to cats, because he has been rubbing his eyes ever since.

View the image taken (**Figure 1**) and consider what your diagnosis would be.

Resolution of the case is described on the next page.

THE RESOLUTION

Differential Diagnosis

- Toxoplasmosis
- Tularemia
- Abscess
- Cat-scratch disease

Diagnosis

The patient has cat-scratch disease.

What to Look For

Cat-scratch disease is a benign and self-limited bacterial infection with *Bartonella henselae*. It is characterized in most cases by a primary papulopustular skin lesion and enlarged localized lymph nodes, with a history of cat contact distal to the involved node. Fatigue, malaise, pharyngitis, conjunctivitis, headache, and low-grade fever may be present. After inoculation, the incubation period is generally a few days to several weeks.

Dermatologic involvement is seen in approximately two-thirds of patients and includes evidence of a scratch with or without a papulopustular lesion, a widespread morbilliform eruption, erythema nodosum (warm, erythematous, and painful nodules in the lower extremities), erythema multiforme, and/or thrombocytopenic purpura. Splenomegaly, weight loss, and parotid swelling rarely occur.

The eye is involved in less than 10% of cases. Usually only one eye is involved, with either granulomatous conjunctivitis

(pinkeye), eyelid lesions (bacillary angiomatosis), or neuroretinitis. Parinaud oculoglandular syndrome is the most common ocular manifestation, with preauricular lymph node swelling on the side of the affected eye and granulomatous conjunctivitis.

In two-thirds of patients, the lesion lasts for less than 1 month, although it may persist for 2 months or more in some cases. Nodes are tender, gradually increase in size, become erythematous and fluctuant, and may become suppurative. Most patients recover without sequelae. Encephalitis may occur in 1% to 7% of cases, typically appearing 2 to 6 weeks after classic cat-scratch disease. Patients may present with associated seizures or status epilepticus.

Treatment

The Infectious Diseases Society of America recommends giving patients with cat-scratch disease 500 mg of azithromycin by mouth on day 1, followed by 250 mg/d for 4 additional days. If the patient weighs less than 45 kg, the recommendation is for 10 mg/kg on day 1, followed by 5 mg/kg for 4 additional days. For bacillary angiomatosis, the recommendation is to give 500 mg of erythromycin four times per day or 100 mg of doxycycline two times per day for 2 weeks to 2 months. ■

Acknowledgment: Image courtesy of Logical Images, Inc. (www.VisualDx.com/JUCM).