



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

If you would like to submit a case for consideration, please e-mail the relevant materials and presenting information to editor@jucm.com.



The patient is a 35-year-old female who got her finger caught in a metal staircase banister one day prior to presentation.

Physical examination is significant for R 5th finger PIP hyperextension and DIP hyperflexion (swan neck deformity). Her PIP flexion limited to about 20°, while her contralateral PIP joint shows about 100 degrees of flexion. No sensory or motor deficits noted.

View the x-rays taken (**Figures 1** and **2**) and consider what your diagnosis and next steps would be. Resolution of the case is described on the next page.

THE RESOLUTION



Figure 3 shows PIP hyperextension of the R 5th finger to about 30° beyond neutral.

Initially, subluxation was suspected, a digital block was performed, and the PIP joint was unsuccessfully reduced.

Post-reduction films showed mild straightening, but persistent PIP joint hyperextension.

This patient has a volar plate disruption of her R 5th PIP joint.

The volar plate forms the floor of the PIP joint, ligamentous at its origin on the proximal phalanx and cartilaginous in its insertion onto the middle phalanx.

A volar plate disruption is usually caused by a hyperextension injury or dislocation of the PIP joint; a mild force may rupture the plate at its distal insertion which will cause a swan neck deformity. Occasionally, a volar plate disruption may also be associated with a fracture of the base of the middle phalanx, which appears on x-ray with a small fragment of bone avulsed from the volar aspect.

As long as the PIP joint is slightly flexed, the joint is considered stable.

A lateral x-ray should be done to confirm that the joint is reduced, and the finger should be splinted in a slightly flexed position with follow-up within three to five days with an orthopedist. If the joint remains dislocated, the patient should be referred immediately.

Acknowledgment: Case presented by Gloria Kim, MD, an urgent care Fellow at University Hospitals Urgent Care, Cleveland, OH.



FIGURE 1



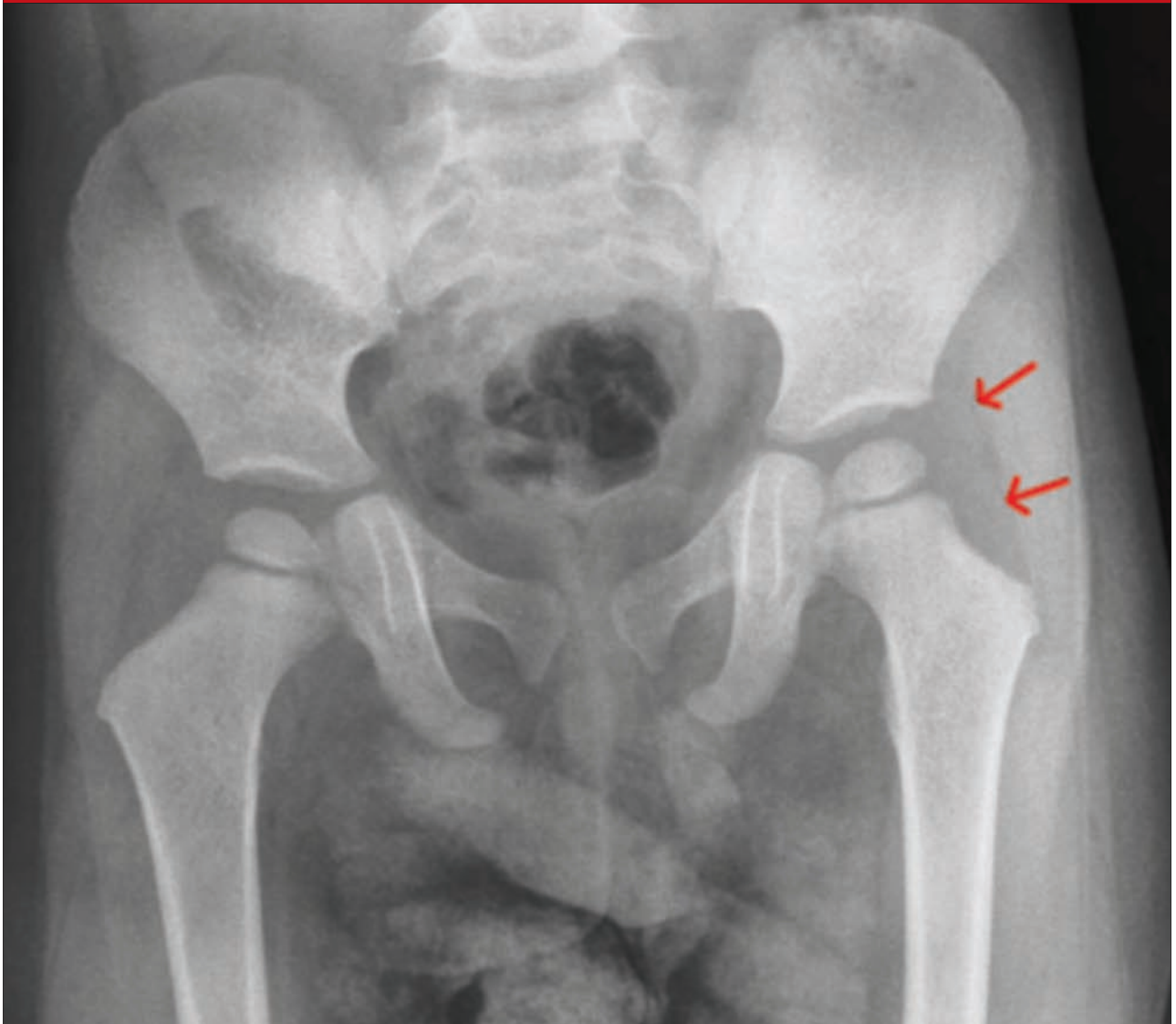
The patient is a boy, age 2 years 8 months, who presents with the complaint of pain in the left leg that started five hours ago. There is no history of trauma.

On exam, the child looks well and has a temp of 98.96° (axillary) and a pulse of 114. In addition, he has a WBC of 17.7, with 73.7% granulocytes.

The child's leg has no external findings. There is clear pain on movement at the hip joint. He cannot bear weight.

View the x-ray taken (**Figure 1**) and consider what your diagnosis and next steps would be. Resolution of the case is described on the next page.

THE RESOLUTION



The x-ray showed fluid in the area of the hip joint, which can fit the picture of a toxic synovitis. Given the presentation and elevated WBC, the child was referred to hospital to rule out a septic arthritis.

Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM; the patient was treated by Dr. Eliyahu Sheleg.