

CLINICAL CHALLENGE

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 7-month-old boy who presents with his parents one day after falling from a bed. The parents state that there was no loss of consciousness; the child looks well and has not vomited.

The parents brought the child in out of concern from the fall. You opt to do a skull x-ray for the same reason.

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 shows a skull fracture with a step off. The lines of the fracture are clearly different than the opposite side of the skull. Given the finding and the boy's age, he was referred for neuro-surgical evaluation.

The issue of x-rays vs. computed tomography for head trauma and diagnosis of skull fracture and intracranial injury remains controversial. In many facilities, CT has replaced plain films as the standard of care due to its accuracy in detecting skull fractures, as well as intracranial bleeding or injury. This may be especially true in cases like this, where there is a palpable step off or depression. In the urgent care center where this patient was evaluated, however, the protocol for patients under 1 year of age is to allow the treating physician to employ his imaging medium of choice.

As noted by BestBETs (Best Evidence Topics; *www.bestbets.org*), "The absence of skull fracture does not predict absence of ICI as seen on CT." As such, had the x-ray *not* shown a fracture, this still would not have ruled out ICI. At any rate, the unambiguous skull fracture justified referral.

Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM, TEREM Immediate Medical Care, Jerusalem, Israel.