LETTER TO EDITOR (VIEWERS CHOICE)

ARE EMERGENCY DEPARTMENT VISITS MISSED OPPORTUNITIES FOR SECONDARY DIAGNOSIS?

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A 3-month-old girl, with a history of breech presentation, was brought to the Emergency Department (ED) after she fell from her father’s lap. The fall caused traction of her left lower limb and resulted in pain and decreased mobility. At the ED she was observed by two specialties: pediatrics and orthopedics. Her lower left limb was flexed and in abduction, with normal passive movement and limited active movement. There was no limited abduction of the hip and the Ortolani reduction test was negative. Limb length discrepancy was absent. A hip radiograph was performed. There were no radiological signs of fracture or subluxation of the left hip. The child was admitted and remained in the observation room (OR) for 24 hours for close monitoring and pain relief. She was then discharged and referred to an Orthopedics consultation for follow up.

At the consultation, a more detailed observation detected a limb length discrepancy and limited abduction of the right hip. An ultrasound confirmed right hip dislocation. A careful review of the radiograph performed on the ED, confirmed pre-existing signs of DDH of the right hip, which were overlooked (Figure 1). The patient was then treated conservatively with an abduction orthosis and now shows a promising evolution.

Figure 1. Bilateral Hip X-ray of the patient that shows a disrupted Shenton’s line.
diagnosis is of extreme importance. Emergency healthcare systems worldwide are under intense pressure from ever-increasing demand. Emergency medicine (EM) is especially prone to diagnostic error. The high workload, time pressure, simultaneous events competing for attention and life-threatening consequences of misdiagnosis are all contributing factors. Mistakes in the assessment of radiographs are a known source of diagnostic error. This patient’s DDH could have been diagnosed if the physicians had had the time to look at the patient as a whole, instead of exclusively focusing on the complaint that brought the child to the ED and overlooking the changes of the right hip on the exam. Several unique factors influence diagnostic errors in pediatrics. These include patient/caregiver interaction, training of physicians and workflow. It is believed that close follow-up of patients and access to electronic medical records may help prevent error, and knowing the outcomes of the patients that are misdiagnosed can provide useful feedback. Referral to a consultation was important to identify the misdiagnosis, and helped track down the evolution of this patient, providing important feedback. It also revealed that an USG should have already been performed at 4 to 6 weeks of age, given the known risk factor.

Clinicians are not comfortable discussing diagnostic errors. These discussions should take place in a nonpunitive environment and physicians should accept accountability for what is within their control. The discussion of cases among peers might provide useful feedback that can potentially allow clinicians to improve their diagnostic methods. This case should be regarded as a learning opportunity. Missed diagnosis occur and should be demystified and reported to help the medical community improve diagnostic approaches. Hopefully this article will also bring attention to a common problem that affects ED physicians – the overcrowding of the ED and time pressure associated with it, that limits correct patient observation. This issue should be addressed with policy-makers and health system managers as it is vital to implement changes to the health system to ensure optimal work conditions and empower medical professionals.

Ethical statement/patient consent: The subject (or their parents/guardians) has given their written informed consent to publish the case. There is no information that might reveal the subject’s identity.

Compliance with Ethical Standards
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References: