TINATIN KUTUBIDZE, MANANA KOBAKHIDZE, IRINE KEKELIDZE, EKA NAKHUTSRISHVILI

UNUSUAL PRESENTATION OF OSTEOMYELITIS

TSMU, G.Zhvania Pediatric Academic Clinic

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თინათინ კუტუბიძე, მანანა კობახიძე, ირინე კეკელიძე, ეკა ნახუცრიშვილი

ოსტეომიელიტის იშვიათი შემთხვევა

თსსუ, გ.ჟვანიას სახ. პედიატრიის აკადემიური კლინიკა

რეზიუმე

ოსტეომიელიტი მცირე ასაკის ბავშვებში რთული სადიგნოსტიკოა, განსაკუთრებით იმ შემთხვევაში, თუ კლინიკური სიმპტომები არასპეციფიურია. დიაგნოზი ხშირად გაურკვეველია პირველადი შეფასებისას. საწყისი პრეზენტაცია შეიძლება იყოს დამახასიათებელი სხვა დაავადებებისთვისაც. 3 თვეზე უფროსი ასაკის ბავშვებს ჰემატოგენური ოსტეომიელიტით, ჩვეულებრივ, აღენიშნებათ ცხელება, კონსტიტუციური სიმპტომები (მაგ., გაღიზიანება, მადის დაქვეითება ან აქტივობა). დიაგნოზის დასადგენად აუცილებელია კლინიკური და პარაკლინიკური მონაცემების მუდმივი მონიტორინგი.

Infantile osteomyelitis is a rare disease that is infective in nature and may rapidly turn fatal, as the disease is often misdiagnosed due to its varied presenting signs. Early diagnosis may help in avoiding systemic involvement and permanent deformity. Osteomyelitis is an infection localized to bone. It is usually caused by microorganisms (predominantly bacteria) that enter the bone via the bloodstream (hematogenously). Osteomyelitis also may result from direct inoculation of bone with bacteria.

The diagnosis often is unclear at the initial evaluation. The initial presentation may be delayed, and signs and symptoms nonspeci c. A high index of suspicion and monitoring of the clinical course are essential to establish the diagnosis. This is very important clue, especially in young infants, who initially present with nonspeci c clinical features. The case of osteomyelitis could be mimicked by severe viral, bacterial infections, reactive arthritis.

Herein we are presenting a case of infantile osteomyelitis. Child presented to our clinic with clinical manifestation of upper respiratory tract infection and history of trauma.

A previously healthy 12-month-old boy presented at the emergency department with a 3 days history of fevers to 38.6 associated with rhinorrhea, cough, nasal congestion and decreased oral intake of fluids. The mother reported that the two weeks prior to admission the child had an episode of trauma of the right elbow, he was evaluated by her primary care pediatrician, roentgenological investigation was preformed and fracture ruled out.

Initial examination revealed a well-developed infant who was crying and seemed mildly disoriented. There were no bruises or abrasions on his face or scalp. His tympanic membranes were mildly erythematous but mobile. There was serosal nasal discharge. The neck was difficult to assess due to the child's lack of cooperation. He was able to arch his back and neck without apparent limitation. There was no cervical lymphadenopathy. The heart and lung sounds were normal. The abdomen was soft without organomegaly. There were no focal neurologic deficits but the child appeared groggy and irritable.

Complete blood count revealed the following: 15 500 WBCs/mm3 (61% segmented neutrophils, 22% lymphocytes, 15% monocytes, and 2% eosinophils); hemoglobin, 12.1g/dL; and 282 000 platelets/mm3. Serum electrolytes, calcium, and glucose were normal. Urinalysis revealed no white blood cells or nitrites. C reactive protein level was 45 ml/L.

The condition was assessed as an acute infection of the upper respiratory tract, antibiotic therapy, infusion therapy was prescribed. The respiratory symptoms resolved, but the fever persisted. Following week swelling and pain of the right elbow was detected, inflammatory markers remained elevated. Computed tomography (CT) scan of the hand showed erosion of the bone and abscess formation along the right elbow. Thus, a diagnosis of osteomyelitis was made. Child successfully completed the antibacterial course of treatment.

Thus, septic osteomyelitis in children is sometimes challenging for physicians to diagnose. The diagnosis often is unclear at the initial evaluation. The initial presentation may be nonspeci c. Children older than 3 months of age with hematogenous osteomyelitis usually present acutely with fever, constitutional symptoms (eg, irritability, decreased appetite or activity). Close monitoring of the clinical course is essential to establishing the diagnosis.

References:

1. Hematogenous osteomyelitis in children: Clinical features and complications, uptodate 2023
2. Hematogenous osteomyelitis in children: Evaluation and diagnosis uptodate 2023
3. Hematogenous Osteomyelitis of the Wrist in Children Journal of Pediatric Orthopaedics 27(7):p 810-813, October 2007. | DOI: 10.1097/BPO.0b013e3181558a9a
4. Diagnostic errors in pediatric bacterial osteomyelitis https://doi.org/10.1111/ped.13979
5. Radiographic Features and Remodeling of Proximal Radius Osteomyelitis in a 14-Month-Old Child With Long-Term Follow-Up: A Case Report. https://digitalrepository.unm.edu/unm_jor/vol7/iss1/34/

ТИНАТИН КУТУБУДЗЕ, МАНАНА КОБАХИДЗЕ, ИРИНЕ КЕКЕЛИДЗЕ, ЭКА НАХУЦРИШВИЛИ

РЕДКИЙ КЛИНИЧЕСКИЙ СЛУЧАЙ ОСТЕОМИЕЛИТА

ТГМУ, Детская академическая клиника им. Г.Жвания

РЕЗЮМЕ

Диагноз септического остеомиелита у детей иногда является сложной задачей для врачей. Диагноз часто неясен при первоначальном обследовании. Первоначальное представление может быть неспецифическим. У детей старше 3 месяцев гематогенный остеомиелит обычно остро проявляется лихорадкой, конституциональными симптомами (например, раздражительностью, снижением аппетита или активности). Тщательный мониторинг клинического течения необходим для установления диагноза.

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SUMMARY

Septic osteomyelitis in children is sometimes challenging for physicians to diagnose. The diagnosis often is unclear at the initial evaluation. The initial presentation may be nonspeci c. Children older than 3 months of age with hematogenous osteomyelitis usually present acutely with fever, constitutional symptoms (eg, irritability, decreased appetite or activity). Close monitoring of the clinical course is essential to establishing the diagnosis.

Keywords: Osteomyelitis, unusual, children