

Recurrent bruising of lower eyelids: a presenting symptom of neuroblastoma in a child

Alt gözkapaklarında tekrarlayan morluklar yakınmasıyla başvuran nöroblastomlu bir çocuk olgu

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A 21-month-old girl referred to our hospital for investigation of bleeding diathesis. She had four months history of intermittent bruising on lower eyelids. Physical examination was unremarkable except the 0.5x1 cm of ecchymosis on the right lower eyelid (Figure 1). The laboratory investigation revealed a hemoglobin level of 11.8 gr/dL, white blood cell count of 8900/mm³ and platelet count of 248000/mm³. The coagulation workup including PT, aPTT and bleeding time was within normal range. Serum lactate dehydrogenase and ferritin were measured as 2248 U/L (normal range 211-411) and 1444 ng/ml (normal range 7-140), respectively. Urinary vanillylmandelic acid level was 23 mg/g creatinine (normal range <18.8). Abdominal USG showed a left supra-renal mass (55x74x68 mm in diameter) with calcifications. Orbital MRI was normal. Bilateral bone marrow aspiration smear showed severe infiltration with neuroblasts (Figure 2). The examination of an open-biopsy material of the abdominal mass revealed neuroblastoma.

It is well known that periorbital ecchymosis is easily recognized and associated with basal skull fractures. In cases without a history of trauma it may be a sign of systemic abnormalities such as neuroblastoma [1]. Particularly in mild cases, the correct diagnosis of this condition is sometimes delayed because of workup for other conditions such as child abuse and hematological coagulopathies. In this case, recurrent bruising of lower eyelids had been previously thought the result from disorders of coagulation.

The characteristic "raccoon eyes" appearance associated with neuroblastoma is probably related to obstruction of the palpebral vessels by tumor tissue in and around the orbits [2]. Interestingly, there was no typical raccoon eyes appearance and metastatic involvement of the periorbital tissue on MRI in our case.

Written consent for publication of the photo from the parents was obtained.

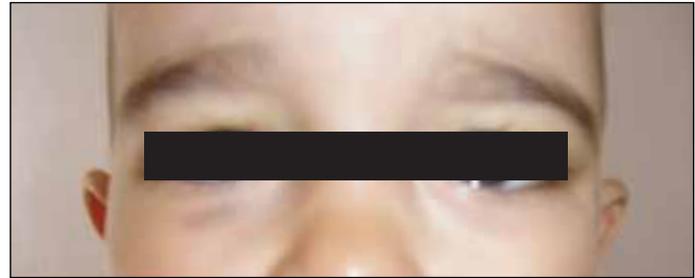


Figure 1. The ecchymosis on the right lower eyelid of the patient at admission

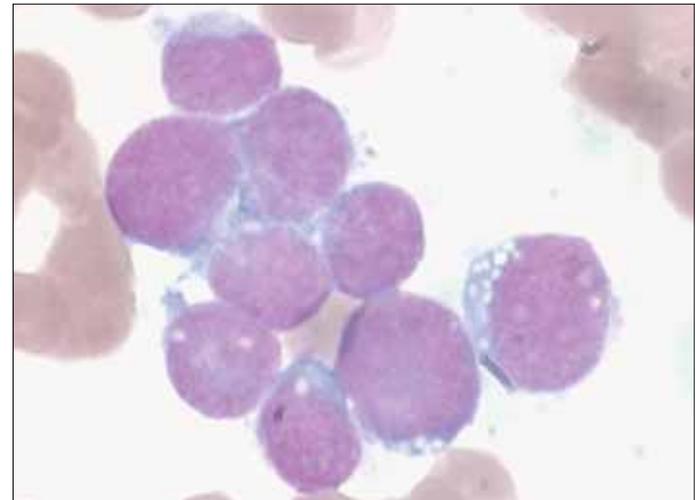


Figure 2. The mononuclear cells (neuroblasts) in bone marrow aspiration smear

References

1. Bay A, Faik Oner A. Raccoon eyes. Indian Pediatr. 2005;42:949.
2. Timmerman R. Images in clinical medicine. Raccoon eyes and neuroblastoma. N Engl J Med. 2003;349:e4.