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CASE REPORT

ALVEOLAR RHABDOMYOSARCOMA ARISING IN A GIANT CONGENITAL MELANOCYTIC NEVUS IN A FEMALE INFANT - CASE REPORT

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ABSTRACT

Giant congenital melanocytic nevus (CMN) is an uncommon nevus in newborns which defined as a predisposing factor for malignancies such as melanoma. Other malignancies such as rhabdomyosarcoma rarely have seen in a giant CMN. We have some reports about rhabdomyosarcoma arising from CMN. Rhabdomyosarcoma presents with nodules, pedunculated lesion, ulcers and skin tags in these patients. Except an adult case, other cases are children. Our case is second patient with alveolar type which have poorest prognosis. According to these reports serially examination, parental education and serious investigation for any changes in integrity of CMN is recommended.

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INTRODUCTION

Giant congenital melanocytic nevus (CMN) defined as a large size nevi greater than 20 cm, can be a precancerous state for some malignancies such as malignant melanoma. Also rare conditions like rhabdomyosarcoma in the context of giant CMN can occur (Holcomb and Murphy, 2010). Rhabdomyosarcoma is the common pediatric soft tissue sarcoma. This sarcoma has four histologic subtypes. Alveolar tumors arise most common in the trunk and carry the poorest prognosis (Kleigman, 2011). Here we present a case with alveolar rhabdomyosarcoma arisen from giant CMN in a seven-month-old girl that suggest carefully follow up for these patients.

Case report

A seven-month-old female infant was born with giant CMN lied in the lower abdomen and upper part of the lower extremities. Her other routine examinations were normal. After 5 months, three skin tags presented in gluteal region Figures/Table 1. The patient was referred to a specialist. He took a punch biopsy of largest lesion in left gluteal, but only melanocytic dermal nevus with congenital pattern was seen in histological report. Two months later, size of skin tags were enlarged and some nodules were added.

Another specialist referred infant to a pediatric hospital and excision biopsy was taken from all the lesions. Pathologist's report is: hyperkeratosis and melanocytic nests in the junction of dermoepidermal area and tumoral lesion characterized by cellular alveolar pattern and in some area with pseudopapillary architecture with mitotic activity and pseudo capsule formation Figures/Table 2. Malignant small round cell tumor was diagnosed with alveolar pattern. IHC expressed desmin and vimentin and was negative for Myogenin, CK, NSE and HMB-45. Other workup including brain, chest and abdominal CT scan were done. Chest CT showed a 3 mm nodular lesion in the anterior part of the upper lobe of the right lung may be a metastatic lesion. Chemotherapy started with actinomycin D and vincristine, cyclophosphamide.

DISCUSSION

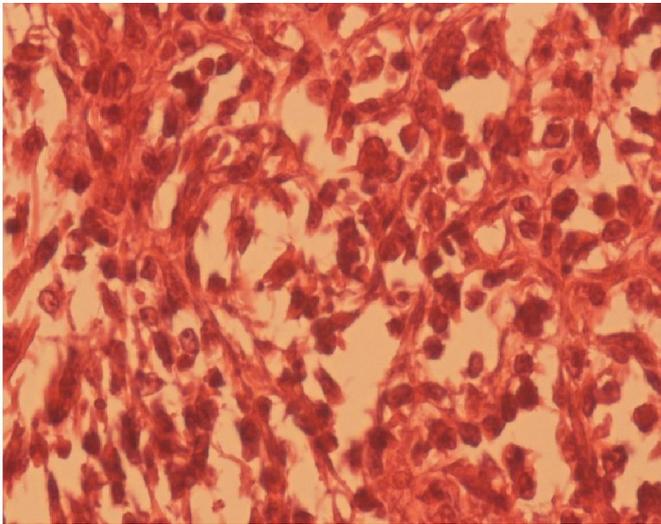
Giant CMN is a rare disease in newborns which predispose some malignancies. Rhabdomyosarcoma is an uncommon disease arising in CMN. Reported an adult case with rhabdomyosarcoma arising from giant CMN in Nov 2013. They have summarized the previous reports on children and their adult case in a table (Chikhalkar *et al.*, 2013). Children with the same problem reported in 2002 and 2004 respectively as well as the last report in 2014 (Hoang *et al.*, 2002). Our case is the second patient with alveolarrhabdomyosarcoma (Christman *et al.*, 2014). It seems that we must carefully track and follow up for giant nevus even if these lesions are not exposed to the sunlight.

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Figures/Table 1



Figures/Table 2

Any changes in color and size must be noticed; and any tags, nodules and ulcerations must be referred to an experienced specialist. Parental education about potential problems as well as regular visit by physicians is recommended.

REFERENCES

- Holcomb, GW. and Murphy, JP. 2010. Ashkraft's Pediatric Surgery. Philadelphia: Edinburgh, Elsevier Saunders. 971 p.
- Kleigman, R. 2011. Nelson textbook of pediatrics. 19th ed: Philadelphia, Pa; 1760 p.
- Chikhalkar, S., Gutte, R., Holmukhe, S., Khopkar, U., Desai, S. and Gupta, S. 2013. Alveolar rhabdomyosarcoma arising in a giant congenital melanocytic nevus in an adult--case report with review of literature. *International journal of dermatology*; 52(11):1372-5.
- Hoang MP, Sinkre P, Albores-Saavedra J. Rhabdomyosarcoma arising in a congenital melanocytic nevus. *The American Journal of dermatopathology*. 2002;24(1):26-9.
- Christman, MP., Kerner, JK., Cheng, C., Piris, A., Nepo, AG., Sepehr, A. *et al.* 2014. Rhabdomyosarcoma arising in a giant congenital melanocytic nevus. *Pediatric dermatology*; 31(5):584-7.
