Case Report

Unilateral acromial dimple in an infant: A case report and review of the literature

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ABSTRACT

Skin depressions overlying the area of the acromion process of the scapula are known as acromial dimples. They are rare in occurrence and usually tend to be bilateral. A unilateral acromial dimple is even rarer and has not been published in the literature so far. Here, we present the case of a unilateral acromial dimple in a 1-month-old male infant who presented to the clinic with a persistent skin lesion on his posterior left shoulder since birth. On examination, he had a solitary dimple overlying the left acromion process. He had a full range of motion of the left upper extremity without weakness or discomfort. Acromial dimples have been described to occur with 18q deletion syndrome, Apert syndrome, and Say syndrome. Acromial dimple when found in isolation without affecting the upper extremity movement does not require further management.

Key words: Acromial dimple, Apert syndrome, Infant, Say syndrome, Shoulder

Skin depressions overlying the area of the acromion process of the scapula area called acromial dimples.They are rare in occurrence and usually tend to be bilateral and bilateral acromial dimples have been described in the literature [2]. A unilateral acromial dimple has not been published in literature. It is suspected that they arise due to tissue entrapment between a sharp bony process and the uterine wall [1]. It is not completely understood how the entrapment can occur symmetrically. It may cause restriction of movement of shoulders. Autosomal dominant inheritance of bilateral acromial dimples has been reported [3,4]. They can either be an isolated finding or be part of a syndrome. We present a case of a unilateral acromial dimple in an infant which seems to be sporadic and non syndromic in occurrence.

CASE REPORT

A 1-month-old Caucasian male infant presented to the pediatric primary care office for a routine well-baby check. The mother had noticed a skin lesion on his posterior left shoulder at birth. She did not have any other concerns regarding the infant at that time. The mother was positive for trichomoniasis during pregnancy which was adequately treated. Maternal use of methamphetamine and tetrahydrocannabinol was reported during pregnancy but the mother's urine drug screen on admission at the time of delivery was negative. The infant was born full term through vaginal delivery. The infant was born to non-consanguineous parents. There were no complications during pregnancy or at the time of delivery. The infant did not have any trauma at the time of delivery. No other known family members have a similar lesion. There are no known musculoskeletal disorders in the family.

On examination, the infant appeared alert and in no obvious distress. His length was at the 56th percentile, weight at the 30th percentile, and head circumference at the 20th percentile. He had a solitary dimple 1 mm deep overlying the left acromion process (Fig. 1). There were no skin changes around the dimple. There was no discharge noted from the dimple. No other apparent dysmorphic features were noted on physical examination. He had a full range of motion of the left upper extremity without weakness or discomfort. He had a symmetric Moro's reflex. The remainder of the systemic examination was within normal limits. Orthopedics was consulted and it was agreed on that no further investigations or management was needed for the isolated finding of the acromial dimple.

DISCUSSION

Acromial dimples are an uncommon finding. They have been described in literature to occur with 18q deletion syndrome, Apert syndrome and Say syndrome [5-7].

Access this article online	
Received - 22 May 2021 Initial Review - 07 June 2021 Accepted - 18 June 2021	Quick Response code
DOI: 10.32677/IJCR.2021.v07.i07.002	

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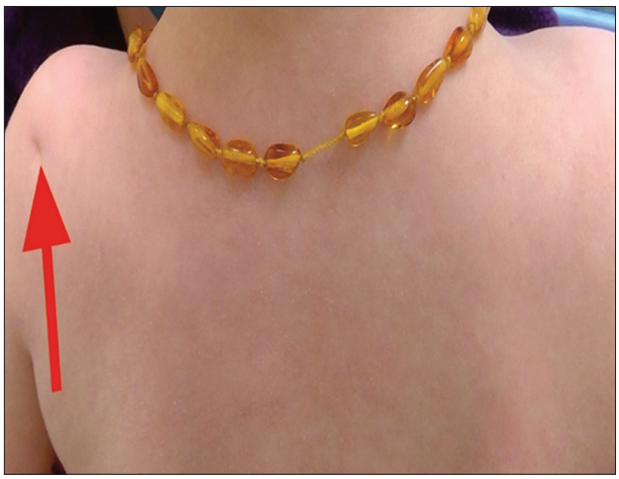

Figure 1: Left-sided acromial dimple

Common features of 18q deletion syndrome include short stature, microcephaly, palatal defects, short frenulum, carp-like mouth, short palpebral fissures, and external ear anomalies. Cardiac anomalies can occur in 24%, including atrial and ventricular septal defects and pulmonary stenosis. Skeletal defects can include scoliosis, foot deformities, and tapering fingers. Decreased serum IgA levels have also been associated with it [8].

Apert syndrome's key feature is premature closure of the skull bones and this craniosynostosis leads to midface hypoplasia, beaked nose, cleft palate, forehead disfigurement and dental abnormalities like crowding or missing teeth [9]. Exophthalmos, hypertelorism, downslanting palpebral fissures, strabismus, ocular proptosis are associated ocular findings. Syndactyly and rarely polydactyly are associated with it [10]. Affected individuals can have varying degrees of intellectual disability [11]. Hyperhidrosis, severe acne and in some instances eyebrows missing hair have been noted [12].

Say syndrome is typically characterized by cleft palate, large protruding ears, microcephaly and short stature. Skeletal and renal abnormalities are associated with it. Delayed bone age is common. Pierre Robin sequence can occur in those affected. Cystic renal dysplasia and proximal renal tubular acidosis have been noted [13]. Cerebral anomalies and seizures have been noted in a case report by Guion-Almeida *et al.* [14].

Acromial dimples when found in isolation seem to be an anatomic variation [15]. There has been a case reported by Wood V. E in which the dimple communicated with and was adhered to the scapula causing discomfort to the infant on limb manipulation with limited range of motion of the shoulder which required a surgical excision of the dimple and scar tissue [1].

There have been case reports of bilateral acromial dimples in which maternal cocaine use was noted but an association between in utero exposure to cocaine and occurence of acromial dimples is yet to be determined [16].

This rare finding when found in isolation without affecting the upper extremity movement does not require further management [17,18].

CONCLUSION

This rare finding when found in isolation without affecting the upper extremity movement does not require further management but pediatricians need to be aware of this unusual cutaneous finding and its potential syndromal associations.

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Funding: None; Conflicts of Interest: None Stated.

How to cite this article: Vasireddy D, Malayala SV, Atluri P. Unilateral acromial dimple in an infant: A case report and review of the literature. Indian J Case Reports. 2021;7(7):272-273.