Medical Journal of the
Islamic Republic of Iran

Volume 19
Number 1
Spring 1384
May 2005

PEDUNCULATED SACRAL LIPOMA PRESENTING AS A HUMAN PSEUDOTAIL

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ABSTRACT

A long pedunculated egg-shaped lipoma of the sacrum in a newborn infant, presenting as a tail, was treated surgically.

Occult spinal dysraphism may be accompanied with this entity. Investigations for underlying dysraphism and its treatment are mandatory.

MJIRI, Vol. 19, No. 1, 87-89, 2005.

Keywords: Pedunculated lipoma, pseudotail, dysraphism, tethered cord.

INTRODUCTION

Pseudotail is a congenital anomaly with a protruding lesion from the lumbosacrococcygeal region.[1] Such a skin lesion may be associated with occult spinal dysraphism, especially tethered spinal cord syndrome.[2] The underlying spinal lesions require detailed neuroimaging investigations to rule out the possibility of tethered spinal cord syndrome that may develop in the future, necessitating preventive measures. Magnetic resonance imaging (MRI) is the modality of choice if available.[3]

Simple excision of suspicious skin anomalies may prevent the diagnosis and on time treatment of tethered cord syndrome.[4]

This rare case is presented to emphasize the importance of early diagnosis and treatment of suspected underlying spinal dysraphism.

CASE REPORT

A 2 day old boy with a pedunculated egg shaped mass presenting as a tail attached to the midline of the sacrum was admitted to the hospital (Figure 1).

The neonate was the third child of a family with two healthy other children. On examination, the mass was covered with sound skin and attached to the sacrum with a cord of 10 Cm length and 5 mm diameter. The neurologic exam was normal. Radiographic investigation did not disclose any spinal dysraphism.

The tail was resected surgically. At operation, there was no relation between the lesion and the spinal canal.

Pathologic study of the specimen showed fatty and fibrous tissues with no nerve fibers, covered by skin (Figure 2).

Follow up of the baby for a period of 30 months did not reveal any neurological deficit.

DISCUSSION

Human tails have been attributed to a disturbance in fetal tail regression which may occur at the gestational age of 6 weeks.[5] Although up till now more than 100 cases of human tail have been reported, true tails which involve the coccygeal vertebrae are rare.[6] Clinical and pathological examination of both vestigial and pseudotail indicate the benign nature of these lesions.[5]

The true tail arises from the most distal remnant of the embryonic tail, contains adipose, connective, muscle and nerve tissues and is covered by skin. Pseudotails present a variety of lesions with common lumbosacral protrusion and are superficial to the vestigial tail. Spina bifida is the most frequent coexisting anomaly with both.[5,7] Occult spinal dysraphism is associated with cutaneous signs in more than half of the reported cases.[5] The presence of tail-like appendages in the lumbosacral region such as tufts of hair, hemangioma, lipoma, skin tags or pigmented nevi should alert the physician to search for occult spinal dysraphism.[5,7] Midline lumbosacral lesions as well as lipoma, hirsutism or pilonidal cyst may be associated with occult spinal defects, the most

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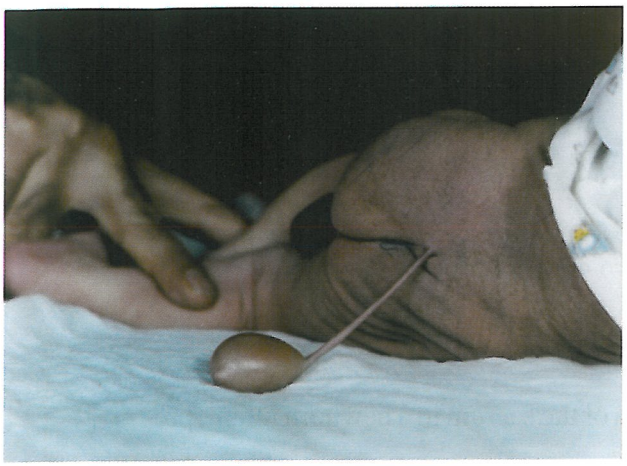


Fig. 1. Photograph of the infant with a pedunculated lipoma.

severe being tethered cord. Even lesions that are not situated in the midline should be carefully explored before excision.[6] Renal or anogenital anomalies can also be associated.[8] Accompanying preventable lesions have no relation to the mechanism by which human tails develop. Persistent differentiation of ordinary vestigial pluripotential embryonic cells and formation of the anomaly on the prior existence of an accessory neuroenteric canal participate in the development of these anomalies.[9] Significance of common skin lesions such as pits and dimples, associated with occult dysraphism is uncertain. Of 75 babies with sacral dimple and pit alone, none had an abnormality, suggesting that these skin lesions do not indicate a high risk of spinal dysraphism.[10]

Preoperative assessment must include a complete neurological history and physical examination as well as CT scan or MRI. In the asymptomatic patient with a skin lesion, roentgenography of the lumbosacral spine has been suggested as a useful screening procedure for identifying underlying problems.[7] Although ultrasonography is a useful diagnostic tool for infants younger than 6 months, MRI provides a clear diagnosis and valuable

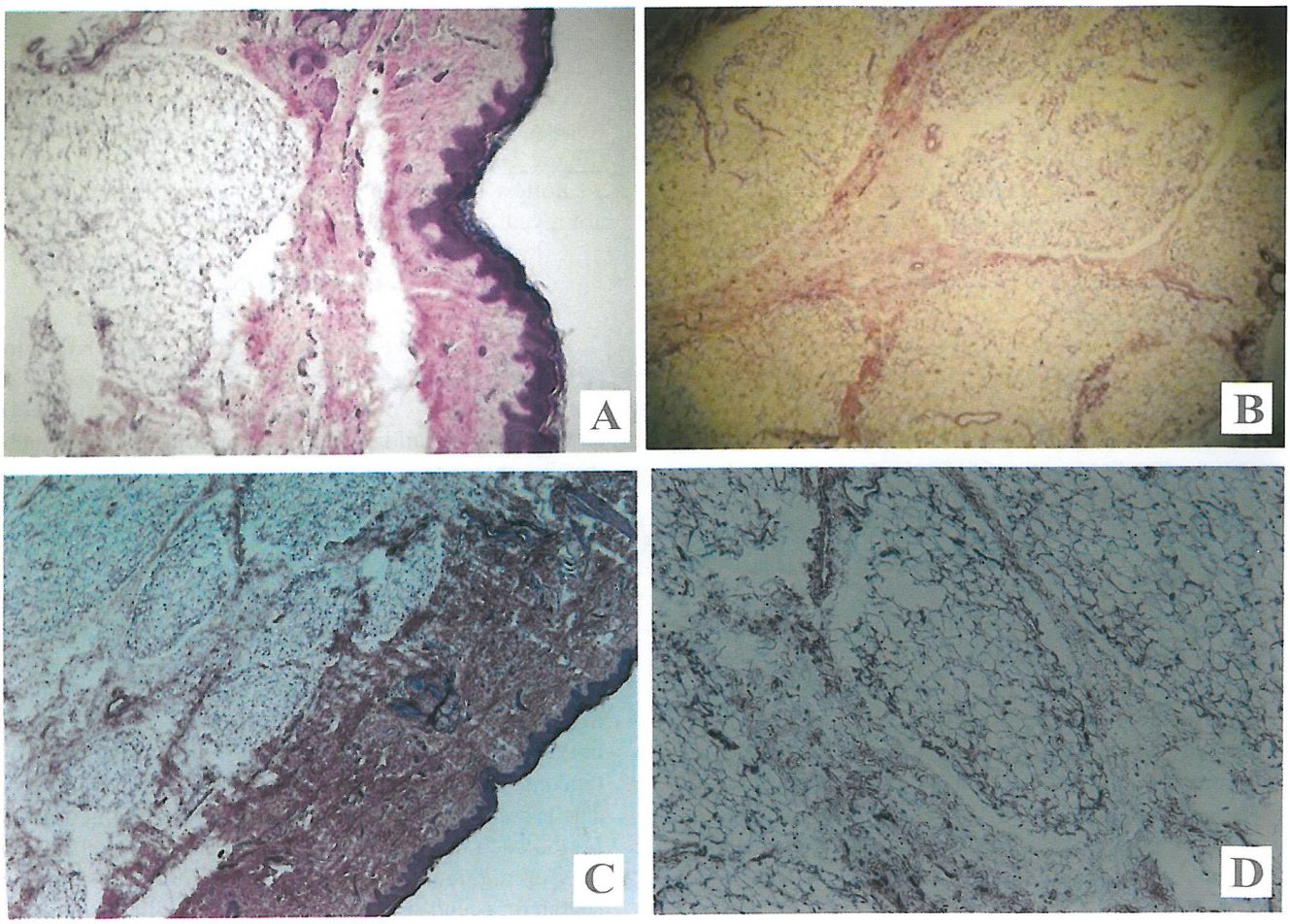


Fig. 2. Histologic sections of the lesion showing fat lobules (B) with mature cells (D) covered by skin (A,C). H&E staining with x40 (A,B) and x100 (C,D) magnification.

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information in the majority of cases.[3] Further studies with MRI were not necessary in our case.

Early treatment of occult spinal dysraphism may prevent progressive neurologic deficit.[7] Simple excision of the human tail may intricate the diagnosis and the on time treatment of preventable tethered cord syndrome.[4]

Postoperative long term follow up of the patients is recommended for possible sequelae such as secondary tethered cord, especially in cases of spinal dysraphism.[1]

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