CASE REPORT

Accessory Limb with Spina Bifida Occulta

MOHAMMAD WASIM KHAN
Department of Neurosurgery Mohid-ud-Din Islamic Medical College
DHQ Hospital, Mirpur AJK – Pakistan

ABSTRACT

Congenital accessory limb attached to low back is exceedingly rare anomaly and only few cases have been reported previously (1). The author presents one additional interesting case where spina bifida L4 L5 and S1 was covered by the appendage of accessory limb.

Key words: *Spina bifida, Accessory Limb, Heteropagus.*

INTRODUCTION

There have been descriptions of babies born with accessory limbs in antique and medieval literature, but the first modern report appeared in 1975.[2] Since then three more cases have been reported.[1]

The author presents a unique case of accessory limb attached to lower back covering the spinal defect with otherwise perfectly normal baby.

CASE REPORT

A 4 months old 4.5 kg female baby was brought to neurosurgery out patient of our hospital with an accessory limb attached to lower back. The baby was born with normal vaginal delivery. The parents were young and they had two more normal children. As with most of the gestations in this area mother never came in antenatal clinic. There was no significant history of maternal illness, drug intake or exposure to radiation.

Physical examination revealed a lower limb like appendage attached to lumbosacral area more on the left side, almost well formed five toes giving the appearance of foot. (Figure 1) The accessory limb was healthy with good blood supply, there were no movements.

The tone power reflexes and in lower limbs were normal. Sphincters were intact Head circumference was with in normal limits. Plain X rays lumbosacral region showed spina bifida L_4 L_5 and S_1 and a long bone with four small distal rudimentary bones in the appendage attached to the left iliac crest.

Ultrasonography of the head abdomen and pelvis was unremarkable. The baby was operated, the appendage was found attached with fibro vascular core to the left iliac region. Meningocele underlying the appendage was visible (Figure 2) Post excision the limb was appearing like foot with leg (Figure 3 a b). Recovery was uneventful (Figure 4). Chromosomal study was not carried out as the family was not willing for any further investigation.

DISCUSSION

An accessory limb with spina bifida has been reported only three times previously.[1,3] The anomaly has also been labeled as tripedus.[4] In another review these anomalies have also been labeled as heterotopic redundancies[5] in which supernumerary parts are found at remote sites or in teratoma.

The morphogenesis of this rare malformation is not clear. It has been suggested that the condition could be the result of aborted modified process of twinning[1] splitting and migration of limb primordial due to some mechanical factor has also been cited as the cause on the basis of animal experiments.[6] The limb buds develop from the mesoderm adjacent to the paraxial mesoderm and a very early splitting of one limb bud and simultaneous mesoderm defect in paraxial mesoderm may result in spina bifida with accessory limb. This may be the most likely explanation

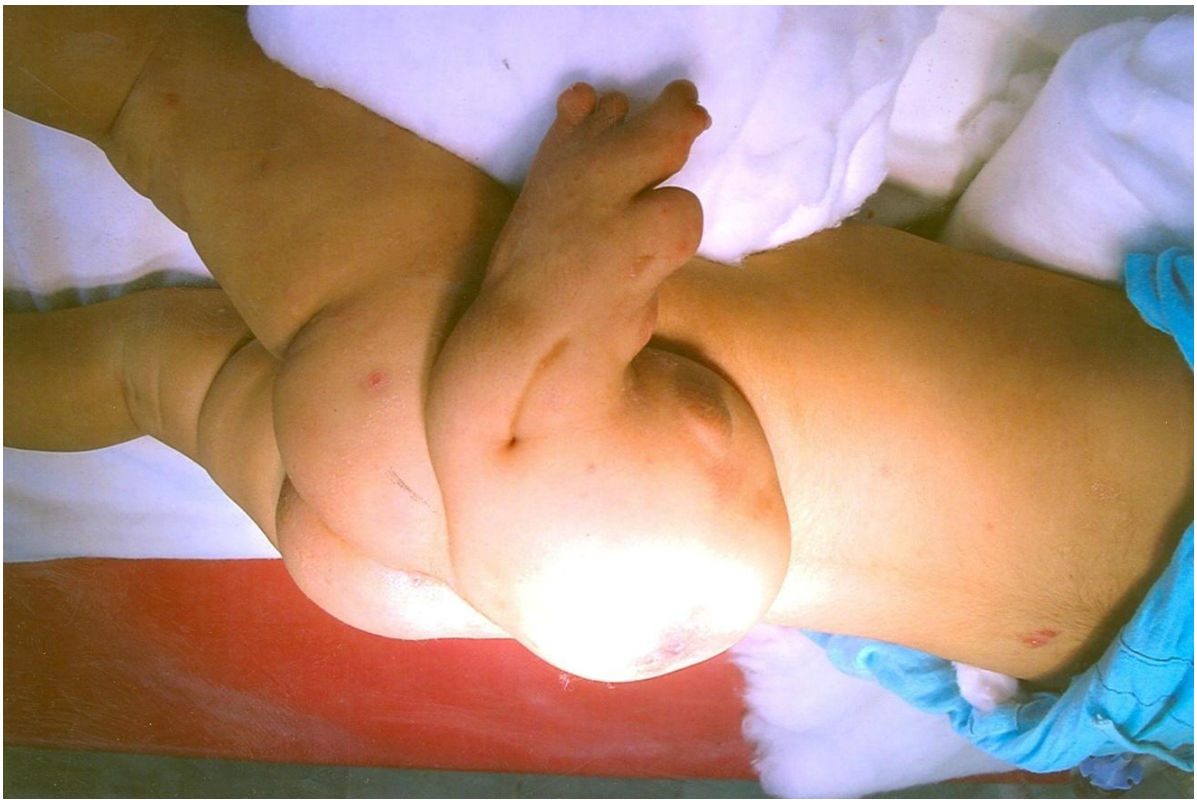


Fig. 1: *Four months old baby with accessory limb attached to low back.*

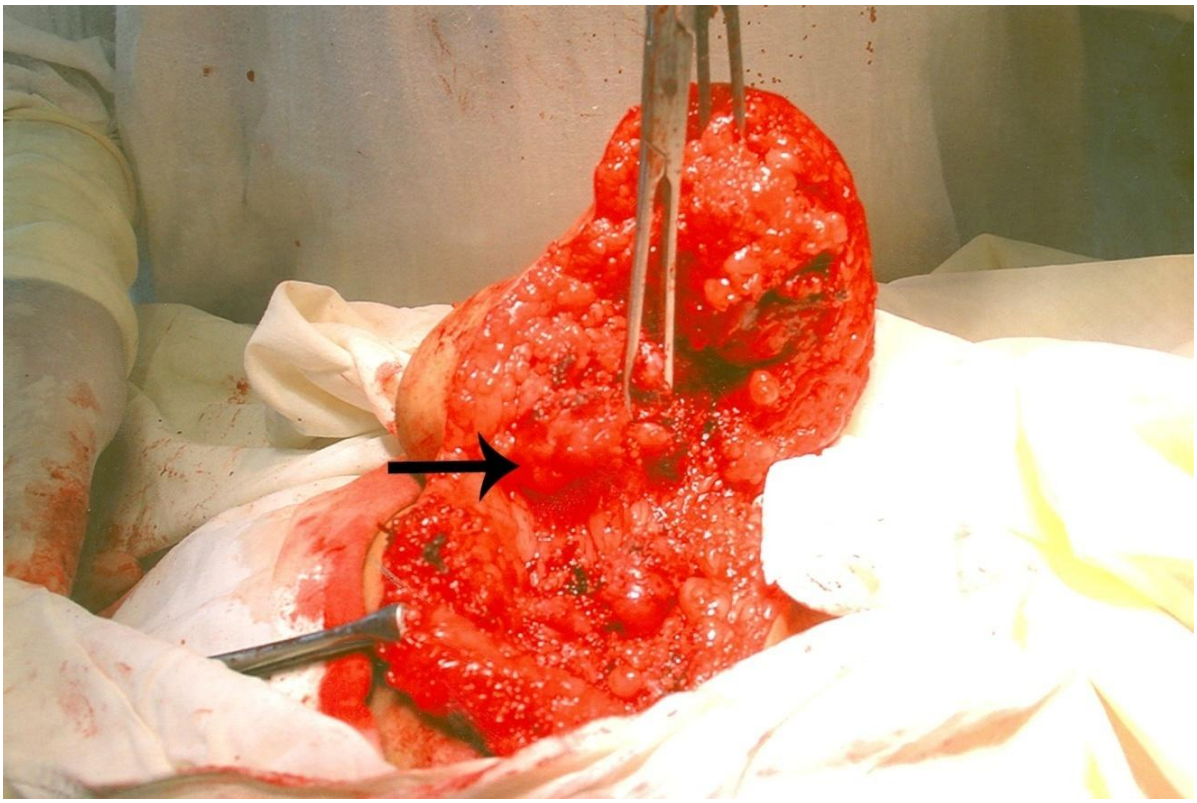
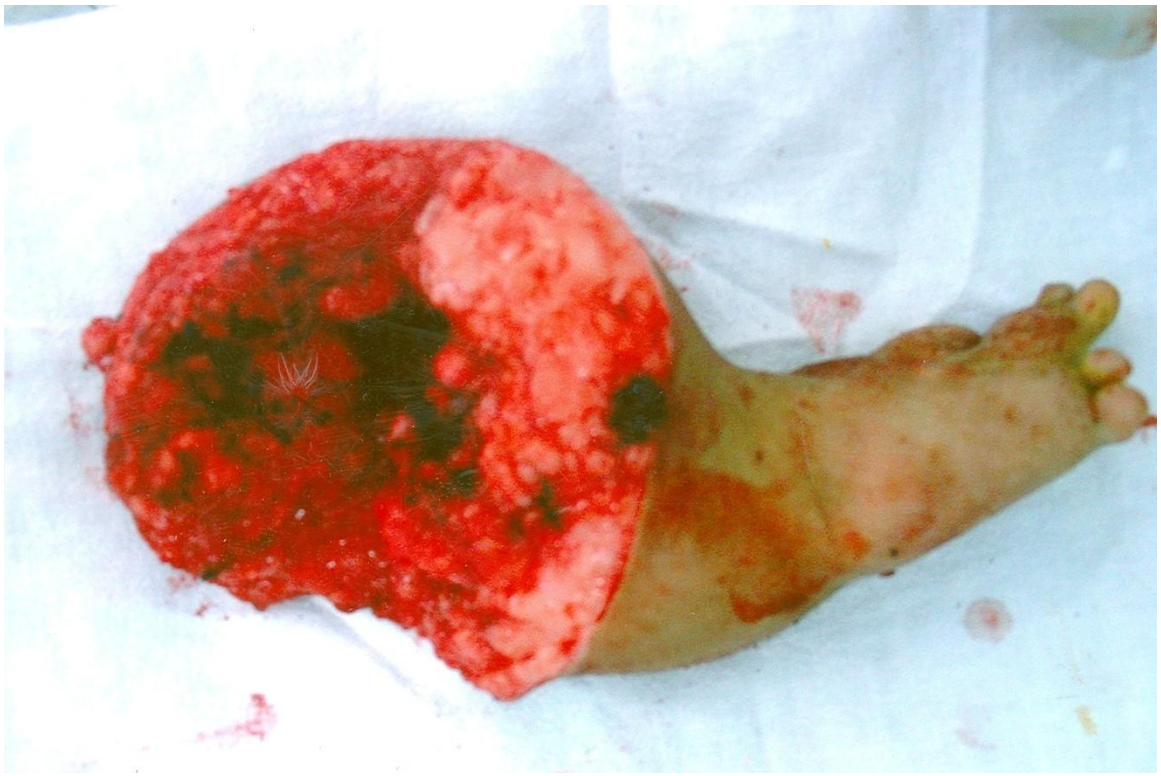
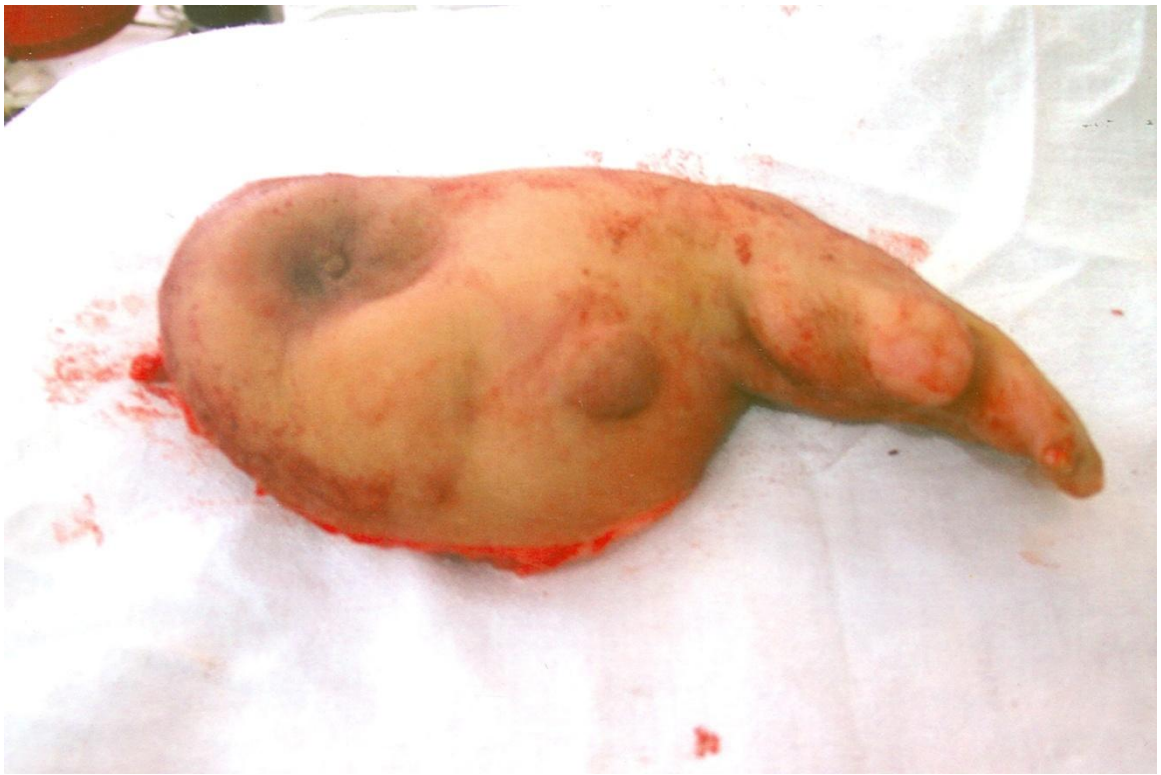


Fig. 2: *Meningocele underlying the appendage of acces-sory limb.*



A



B

Fig. 3a,b: *Post excision views of accessory limb.*

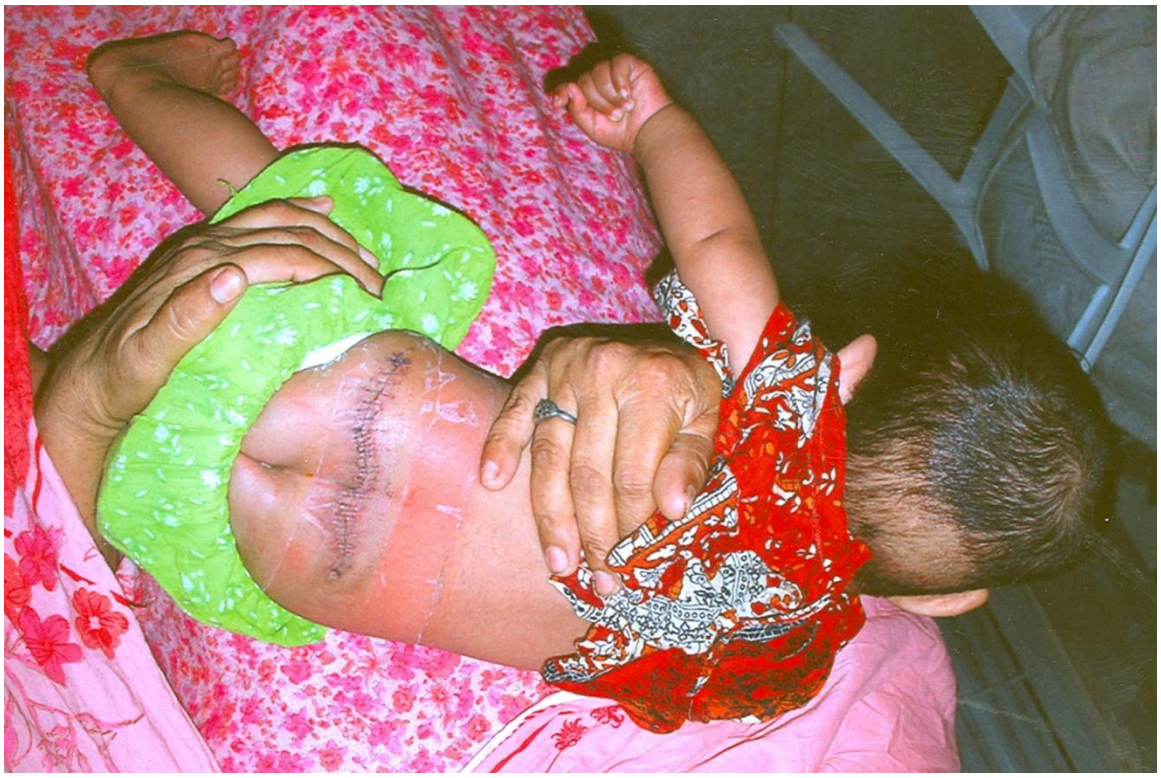


Fig. 4: *Post op uneventful recovery.*

of this anomaly.

The fairly well differentiated accessory appendage is not warranting classification of teratoma.

At the end of this report it is not still clear whether the case should be diagnosed as incomplete twinning, Heteropagus teratoma or heterotopic redundancy.

Address for Correspondence:
Dr Mohammad Wasim Khan
MBBS, FCPS
Assistant Professor Neurosurgery Mohid-Ud-Din
Islamic Medical College
Consultant Neurosurgeon
DHQ Hospital Mirpur AJK Pakistan
House 10 A, sector A 5, Mirpur AJK
Phone: 00925827443470
Cell: 00923005038993
E mail drwasimabbasi@yahoo.com

REFERENCES

1. Akyol D, Baltaci V, Kozinoglu H, Yuksel K, Kis S, Çicek N and Gungor T. Accessory Limb Attached to the Back Tr. J. of Medical Sciences 1999; 29: 199-201.
2. Tanaguchi K, Kurimoto H, Okamura T. Baby with a third leg. J Pediatr Surg 1975; 10: 143-144.
3. Sharma L, Sing R.B, Bargawa J.S, and Sharma V.K Accessory limbs with spinal lesions. Pediatr Surg Int 1991; 6: 227-229.
4. Krishnan A,Chandna S, Misra NK, Gupta AK, Upadhaya P. Accessory limb associated with spina bifida. J pediatric surg 1989; 24: 604-606.
5. Rahilly R. Morphological patterns in limb deficiencies and duplication .Am J Anat 1951; 89: 135-187.
6. Nicholson GW. Studies of tumor formation. Butterworth London 1950.
7. Chadha R, Bagga D, Malhotra C.J, Dhar A, Kumar A. Accessory Limb Attached to the Back pediatr Surg 1993; 28 (12): 1615-1617.