

A surprise case of triskeles: a three-legged neonate

Derived from the Greek word triskeles meaning three legs, the triskele is an ancient symbol made up of three spirals or three legs joined at the centre. A supernumerary limb, or polymelia, is a rare congenital anomaly in humans and this article presents the case of a term infant born with a limb-like appendage attached to the medial aspect of the left thigh.

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The case

We report a case of a postnatal diagnosis of polymelia in a term female neonate born by caesarean section at 39⁺¹ weeks to parents of Asian Indian origin. The parents were non-consanguineous and there was no family history of deformities. There was an unremarkable antenatal period with no noted use of maternal teratogenic drugs.

The neonate was identified to have a limb-like appendage attached to the medial aspect of the left thigh by a long thick non-bony skin peduncle (**FIGURE 1**). Attached to this peduncle was a well-formed foot with a sole and three toes. A thorough clinical examination was normal. No radiological investigations were indicated as the accessory limb was attached by a skin peduncle. No sensory function was detected in the supernumerary limb and no voluntary movement was noted. No other dysmorphism was observed and the infant remained well. There were no difficulties in the clinical management of the neonate. While using nappies, the limb did not get in the way and it could be gently tucked away in the baby's clothing.

A discussion with the plastic surgery team (with medical photographs) concluded with a non-urgent referral as there was no bony involvement. The parents were initially shocked, however once the management and prognosis was explained they felt more positive. The infant has now had a successful excision of the accessory limb and will remain under follow-up until one year of age.

Discussion

Polymelia is an uncommon anomaly in humans, which has been sub-classified



FIGURE 1 The limb-like appendage with a thick skin peduncle and a well-formed foot with three toes, attached to the medial aspect of the left thigh region.

based on where in the body the extra limb(s) is attached:

- cephalomelia: the extra limb is attached to the head
 - pyromelia (pygomelia): attached to the pelvis
 - thoracomelia: attached to the thorax
 - notomelia: attached to the backbone.
- Polymelia is rarely reported in the literature. A quick search of PubMed reveals just six articles describing case reports of human polymelia.¹⁻⁶ Just three of these report an extra limb attached to the well-grown leg of an infant, as in the case reported in this article.²⁻⁴

Fetal limb development is a complex process and the pathogenesis of anomalies

Keywords

polymelia; supernumerary limb; congenital anomaly

Key points

Giffi M., Siddhi P. A surprise case of triskeles: a three-legged neonate. *Infant* 2024; 20(2): 47-48.

1. There is an extreme lack of literature on polymelia.
2. The case discussed here presented at birth with a supernumerary lower limb bud and well-formed foot on the left thigh.
3. This case supports the need for improved understanding on the development of polymelia and treatment outcomes.

associated with limb development is not completely understood. Genetic and environmental factors (especially teratogenic drugs) are common associated factors of limb deformity. A thorough genetic analysis was undertaken in this case and no abnormalities were revealed.

Very rarely, polymelia is associated with a remnant of a parasitic twin.⁵ In the case reported here, the antenatal scans identified a single fetus with no anomalies, however, most of the scans reported difficult views due to the presence of an

anterior uterine wall fibroid. This would have limited the identification of polymelia.

Parental consent

The authors obtained written consent from the child’s mother for publication of the case history and image.

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