## IMAGES IN NEONATAL MEDICINE

## Macrodystrophia lipomatosa in a healthy newborn

A 15-day-old boy presented with an isolated enlargement of his second left toe. Physical examination showed no oedema, no bruit, no marks of amniotic constriction bands, or changes in the skin or the toenail. Afterwards, the toe exhibited a disproportionate growth with a progressive lateral deviation and dorsal flexion (figure 1). Radiography showed an increase in size that involved the bone and the soft tissues (figure 2).

Feriz first used the term macrodystrofia lipomatosa (MDL) to describe an unusual form of gigantism of the lower extremity. The most frequent clinical pattern is the unilateral involvement of a lower limb, usually the second or the third toes. It preferentially affects the distal and volar aspects of the fingers. It may be associated with other anomalies as polydactyly or syndactyly or it can be an isolated finding in a patient otherwise healthy as in this case. It has recently been linked to PIK3CA mosaicism. 4

The diagnosis can be confirmed by radiological tests and histopathology.<sup>5</sup>

Although MDL is a benign condition, progressive deformities can cause physical impairment and interfere with daily activities. MDL is also related to premature degenerative joint changes and to neurovascular compression. Surgical intervention is the mainstay of the treatment. As progressive overgrowth and deformity was observed, amputation of the second ray was performed at 17 months of age. The patient actually is 3 years old and has no functional limitations or neurological sequelae.



**Figure 1** Disproportionate enlargement with dorsal flexion of the distal phalanx (12 months old).



**Figure 2** Radiograph, showing involvement of the bones and the soft tissues (4 months old).

Follow-up is mandatory to detect early recurrences or additional signs that could lead to the diagnosis of a syndromic macrodactyly.

## Patricia Meseguer-Yebra, <sup>1</sup> Carmen Meseguer-Yebra, <sup>2</sup> Almudena Hernández-Núñez <sup>3</sup>

<sup>1</sup>Department of Pediatrics, Primary Care Center of Tordoia, Tordoia (A Coruña), Spain

<sup>2</sup>Section of Dermatology, Hospital Virgen de la Concha, Zamora, Spain <sup>3</sup>Section of Dermatology, Hospital de Fuenlabrada, Fuenlabrada (Madrid), Spain

Corresponding to Dr Patricia Meseguer-Yebra, Department of Pediatrics, Primary Care Center of Tordoia, Centro de Salud de Tordoia, Rúa Pontepedra s/n, Tordoia (A Coruña) 15683, Spain; patricia.meseguer.yebra@sergas.es

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; internally peer reviewed.



**To cite** Meseguer-Yebra P, Meseguer-Yebra C, Hernández-Núñez A. *Arch Dis Child Fetal Neonatal Ed* 2015;**100**:F478.

Received 20 January 2015 Revised 9 March 2015 Accepted 15 March 2015 Published Online First 8 April 2015

Arch Dis Child Fetal Neonatal Ed 2015;**100**:F478. doi:10.1136/archdischild-2015-308280

## **REFERENCES**

- Feriz H. Makrodystrophia lipomatosa progressiva. Virchows Arch Pathol Anat Physiol Klin Med 1925;260:308–68.
- 2 Guzoglu N, Gokmen T, Oguz SS, et al. Isolated macrodystrophia lipomatosa of the foot in a neonate: a case report. Clin Dysmorphol 2012;21:53–5.
- 3 Albright SB, Wolfswinkel EM, Caceres KJ, et al. Bilateral macrodystrophia lipomatosa with syndactyly: a case report and literature review. Hand Surg. 2013;18:267–72.
- 4 Lindhurst MJ, Parker VE, Payne F, et al. Mosaic overgrowth with fibroadipose hyperplasia is caused by somatic activating mutations in PIK3CA. Nat Genet 2012;44:928–33.
- 5 Khan RA, Wahab S, Ahmad I, et al. Macrodystrophia lipomatosa: four case reports. Ital J Pediatr 2010;36:69.