Macrodystrophia lipomatosa; local gigantism

INTRODUCTION
Macrodystrophia lipomatosa (ML) is an uncommon congenital type of localised gigantism that can involve the digits, or whole extremity, that was first described by Feriz in 1925. Radiological investigations, especially MRI, can help to make a definitive non-invasive diagnosis, and to differentiate it from other causes of macrodactyly. The exact aetiology of unilateral overgrowth of the limb due to ML is not known, various hypotheses exist, including limb bud development anomalies during the embryologic period of life. General clinical problems related with ML are cosmetic reasons and mechanical problems due to an enlarged extremity.

CASE REPORT
A 23-year-old female was admitted with discomfort and undesired physical appearance of her foot. The second toe of her foot was larger than all her other toes since birth. She was complaining about difficulty in wearing shoes and slippers. The second toe of her foot was bigger than her big toe and angulated dorsally due to hypertrophy of the plantar soft tissue compartment (figure 1). Her toe was hypertrophic in nature from the metatarsophalangeal joint level. Examination by x-ray showed soft tissue hypertrophy, and degenerative changes of joints (figure 2). MRI examination showed abundant fatty infiltration of the soft tissues and cortical thickening in the osseous tissues (figure 3). Histopathologic examination of the biopsied specimen was found to be hypertrophic fibroadipose tissues which affect the nerves. Our differential diagnosis was ML, and we applied amputation to the second toe. The patient has improved after surgical intervention.

Localised type of hypertrophy in all tissues of a toe clinically predicts ML on differential diagnosis. Degenerative changes at direct x-ray, and fatty predominance at MRI examination, point to this diagnosis. In this case, we confirmed the ML histologically by showing that the nerves are also affected by fatty infiltration, which is a main determinant of the diagnosis. These data distinguish ML from other causes of macrodactyly. Treatment options for this disease can be reviewed as defatting
and dissecting out excessive fibroadipose tissue, epiphysiodesis and also amputation. Amputation is a considerable treatment for adult cases according to current literature.

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