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DISCLOSURE


The authors have no conflicts to disclose.
INTRODUCTION.

- Macrodystrophia lipomatosa (MDL) is a rare cause of local gigantism affecting hands or feet.
  - Non-hereditary and congenital.
  - Unknown etiology.

- The main characteristic of this gigantism is the overgrowth of all the mesenchematic structures like bone, tendons, vessels, nerves and predominantly the fibroadipose tissue.


- The low incidence of this pathology leads to scarce treatment recommendations including cytoreduction and amputation

OBJECTIVE

Describe the surgical technique and clinical results of extended dorsal approach in the management of 4 cases of MDL of the foot.
METHODS

- Retrospective study of case series.

- Collection of pre-operative radiological and clinical images; Intraoperative data and postoperative clinical and radiological images.

- Review of clinical record of patients.
SURGICAL TECHNIQUE

- An extensile dorsal approach was performed in all the patients preserving the neurovascular bundles.
- Bone resection was performed until the toe got an harmonic appearance related to the rest of the foot.
  - In one case removal of the distal phalanx was performed to achieve adequate reduction
- Then all the remnant soft tissues were removed from dorsal and distal, keeping always the plantar neurovascular supply.
- Skin closure was done with non-absorbable sutures.
A 38 year old male patient, with a disproportionate increase in the size of the left hallux. Difficulty with shoe wear, pain and paresthesias. No history of neurofibromatosis or other relevant family diseases.

**Physical examination:** preserved sensitivity, restricted mobility in MTP and IP joints. No signs of active infection.

**X-rays:** shows a diffuse increase in size of the 1st metatarsal and hallux phalanges with severe involvement of their respective joints.

**Surgical plan:** Partial amputation and cytoreduction of hallux.
Results and follow up:

- Biopsy showed abundant fibrous tissue and confirmed MDL.
- Patient evolved with superficial wound complication but no need for further surgeries.
- At the last follow up with no sensory deficit, previous mobility preserved and with an excellent patient satisfaction.
Male patient of 41 year old, with no family history of neurofibromatosis or other relevant diseases. No previous interventions.

**Physical examination:**
- Disproportionate increase of 4th left toe.
- Conservative sensitivity, no wounds.
- Decreased motion in MTP and IP joints.

Radiographs confirmed increased size of phalanges.
Clinical follow up:

- No wound complications and preserved sensitivity.

- Prior mobility preserved without pain.

- Patient satisfaction was excellent in terms of functionality and cosmesis.
<table>
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<tr>
<th>CASE</th>
<th>AGE</th>
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<th>TOE</th>
<th>COMPLICATIONS</th>
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CONCLUSION

- The reductive surgery for adults with symptomatic MDL of the foot offers good results, in terms of relief of pain and cosmesis.

- The use of extended dorsal approach and cytoreduction provides excellent surgical exposure, preserving neurovascular bundles and allows an appropriate reduction of excessive tissue.

- Based on our clinical results and the high satisfaction of our patients, we suggest cytoreduction surgery as an alternative to amputation in selected patients with MDL diagnosis.
REFERENCES