A RARE CASE OF ACQUIRED BILATERAL PES EQUINOCAVUS IN A 12-YEAR-OLD MAN

Konstantas O.[1]; Paraskevopoulos N.[1]; Zogakis P.[1]; Chatzikyriakos A.[1]; Kaltsa S.[1]; Lykos S.[1]; Kallaras E.[1]; Pechlivanidou E.[1]; Sfyris A.[1]; Kolovos P.[1]; Margariti R.[1]; Katsouli A.[1]; Zampakidis C.[1]; Sekouris N.[1]

[1]General Children's Hospital of Athens "Panagiotis & Aglaia Kyriakou"

INTRODUCTION

Pes equinocavus is characterized by limited ankle dorsiflexion, excessively high longitudinal plantar arch of the foot, hindfoot varus, plantarflexion of first ray and forefoot adduction. The most common causes are Charcot-Marie-Tooth disease and neglected trauma.

OBJECTIVE

We present a rare case of an acquired painful bilateral pes equinocavus deformity in a 12-year-old male not associated with any neurological background.

MATERIALS & METHODS

- 12-year-old male
- Absence of any significant past medical history
- Complaint of painful “lifted arches”, aggravating over the last 2 years
- Physical examination:
  - ✓ high arch bilaterally
  - ✓ restricted ankle ROM (espec. in ankle dorsiflexion)

Figure 1. Pre-op Clinical Situation

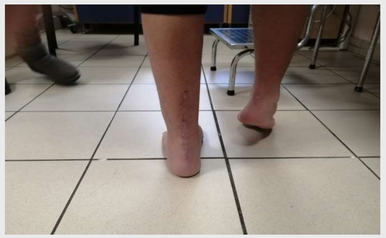

Figure 4. Post-op Clinical Situation.

MATERIALS & METHODS

- Pre-op.:
  - ✓ X-ray & CT
  - ✓ Neurological consultation, genetical tests and electrodiagnostic studies:no neuromuscular disorder
- Intra-op:
  - ✓ Plantar fascia release
  - ✓ Achilles tendon Z-plasty
  - ✓ Peroneus longus lengthening
  - ✓ First metatarsal dorsiflexion osteotomy

Figure 2. Pre-op Clinical Situation

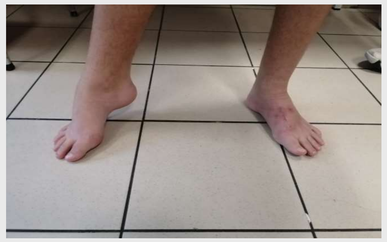

Figure 5. Post-op Clinical Situation.

RESULTS

Post-op:

- ✓ 0-6th Week: NWB
- ✓ 6-8th Week: ROP & PWB
- ✓ At the 2 months of follow up: A plantigrade foot and correction of equinocavus deformity were identified.

Meary's Angle Pre-op:14°
Meary's Angle Post-op:2°

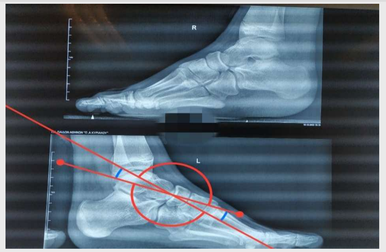

Figure 3. Pre-op X-ray.

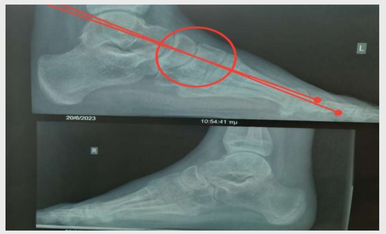

Figure 6. Post-op X-ray.

DISCUSSION

It is critical for the clinician to accurately determine the underlying pathology of an equinocavus foot. This would include a neurological disease, a genetic disorder or an idiopathic deformity. A thorough pre-operative planning is also necessary in order to better analyse all aspects of the deformity. In that way, the most suitable combination of surgical procedures may be decided to ensure a satisfactory outcome. To our knowledge this case is rare, due to the lack of neuromuscular background and the late onset of the deformity.

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