A congenital curved nail of the fourth toe

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INTRODUCTION

• Congenital curved nail of the fourth toe (CNFT)
  – A rare nail deformity first reported by Iwasawa et al. in 1991
  – The fourth toenail deformity characterized by a plantarly curved
    nail plate, which is parallel to the longitudinal axis of the distal
    phalanx

• Herein, we report a case of congenital curved nail of the fourth
  toe without underlying bony or soft tissue defect.
M/7

Chief complaint) Tender, bilateral fourth toenail deformity since birth

Gross apperance) Bilateral fourth toenail covered not only the dorsal but also some of the plantar aspect of both distal phalanges, other toenails and fingernails were normal apperance

P/Hx. non-specific       F/Hx. non-specific

P/Ex.) The motion of the fourth toe was not restricted

Treatment) Regular follow-up
Figure 2. Radiologic examination of both feet revealed an absence of bone deformity or soft tissue defect. (both feet AP)
DISCUSSION

• Diagnostic criteria
  – Involvement of the fourth toe only, all other digits being normal
  – Hypoplasia of the distal phalanx, without restriction of the range of motion of the interphalangeal joints
  – Absence of deformities of any other ectodermal organ

• But, some cases without underlying bony or soft tissue defect have been reported.
DISCUSSION

• Pathology
  – CNFT is thought to result from a mesodermal abnormality rather than an ectodermal abnormality.
    ▪ Other disorders of fingernails and toenails are not accompanied with congenital curved nail.
  – Secondary nail deformity caused by congenital hypoplasia or loss of the distal phalanx
  – However, it is unknown why only the fourth toes are affected.
DISCUSSION

• Treatment
  – Conservative therapy (such as avoiding trauma)
    – To prevent permanent deformity and complications
  – Surgical treatment

• Due to low prevalence of the congenital curved nail of the fourth toenail, this report is meaningful.
REFERENCES


