Journal of the Turkish Academy of Dermatology
eISSN 1307-394X

Letter To The Editor
DOI: 10.6003/jtad.1610l1

Congenital Malalignment of the Great Toenails

To the Editor. - Congenital malalignment of the great toenails is characterized by lateral deviation of the nail plate which is frequently associated with nail dystrophy. Lateral deviation of nail plates is not parallel to the distal phalanx. The nails grow slowly, with thickening, curving and transverse ridging. The diagnosis of congenital malalignment of the great toenail is usually at birth or in early infancy. Malalignment of the great toenails is being increasingly recognized as a cause of infantile and childhood onychogryphosis and ingrown toenail [**1**]. There has been debate as to whether the condition is inherited or acquired in utero secondary to improper fetal positioning [**2, 3**]. We report a 6 month-old male baby with congenital malalignment of the great toenails.

A 6 month-old male baby was referred for ingrown toenails and paronychia of the bilateral great toenails which had been present at birth. Physical examination revealed laterally deviated both ingrown great toe nails. Erythema, tenderness and a soft tissue hypertrophy were observed on the both great toenail folds (**Figure 1**). There was no history of trauma to the toenails. His brother and sister had also experienced ingrown toenails since childhood. Patient was followed up with daily foot bath of diluted povidone-iodine and topical mupirocin. Avoidance of trauma was advised. After six-month follow-up, significantly decrease in deviation and soft tissue hypertrophy was noticed (**Figure 2**).

Genetic factors, hereditary and embryological abnormalities factors such as intrauterine pressure, amniotic bands, or vascular abnormalities during fetal life have been thought as possible etiologic factors [**4**]. Although congenital malalignment usually involves great toe nails; it may rarely involve other toenails and fingernails as well. Half of all patients show spontaneous improvement, however, the remainders suffer from severe complications, such as recurrent paronychia, increasing hypertrophy of the nail plate, or inability to cut the nail [**4, 5**]. If surgical treatment is delayed, persistent nail bed dystrophy may result. So, for children

Figure 1. Erythema, tenderness and a soft tissue hypertrophy on the both great toenail folds

Figure 2. Significant decrease in deviation and soft tissue hypertrophy

Published: *J Turk Acad Dermatol* 2016; **10 (1)**: 1610l1. This article is available from: http://www.jtad.org/2016/1/jtad1610l1.pdf
Keywords: Congenital malalignment, toenail

in whom improvement is not noted by the age of 2 years, surgical treatment is advised.

Due to low prevalence of congenital malalignment of the toenail, we find this report meaningful.

Mutlu Çayırlı,[1] MD
Nehir Parlak,[2] MD
Adem Parlak,[3] MD
Salim Özenç,[4] MD

[1]*Mevki Military Hospital, Department of Dermatology, Ankara,*

[2]*Etimesgut State Hospital, Department of Dermatology, Ankara,*

[3]*Presidential Guard Regiment, Department of Family Medicine, Ankara,*

[4]*Diyarbakır Military Hospital, Department of Family Medicine, Diyarbakır, Turkey*

E-mail: mutlu78tr@yahoo.com

References

1. Özdemir E, Bostancı S, Akyol A, Ekmekci P, Gürgey E. Congenital Malalignment of the Great Toenails in a Pair of Monozygotic Twins. J Am Podiatr Med Assoc 2005; 95: 398-400. PMID: 16037558.
2. Chaniotakis I, Bonitsis N, Stergiopoulou C, Kiorpelidou D, Bassukas ID. Dizygotic twins with congenital malalignment of the great toenails: reappraisal of the pathogenesis. J Am Acad Dermatol 2007; 57: 711-5. PMID: 17692994.
3. Kus S, Tahmaz E, Gurunluoglu R, Candan I, Uygur T. Congenital malalignment of the great toenails in dizygotic twins. Pediatr Dermatol 2005; 22: 434-5. PMID: 16190995.
4. Batalla A, Curto JR. Congenital malalignment of the great toenail. Report of two cases. Dermatol Online J 2014; 20: 21251. PMID: 24456954.
5. Handfield-Jones SE, Harman RR. Spontaneous improvement of congenital malalignment of the great toe nails. Br J Dermatol 1988; 118: 305-6. PMID: 3348974.