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Clinical Image Open Access

Bilateral Ectrodactyly, Syndactyly with Split Foot Malformation in a Healthy Living New-Born Infant

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Clinical Image

We performed an assessment of a baby girl born late term, appropriate for gestational age at 41 weeks by normal spontaneous vaginal delivery. This was the 3rd pregnancy of the mother and other children had no problems during or after birth. The mother had anemia during pregnancy and controlled gestational diabetes with haemoglobin A1C of 6.3 and 6.4% and finger stick values of 112, 75 and 94 mg/dL. She had adequate prenatal care with normal prenatal ultrasounds. On physical examination, the right foot showed the absence of the 2nd toe with resultant V-shaped cleft, fused 3rd and 4th toes, and a small rudimentary 5th toe (Figures 1-3). The left foot showed vestigial 3rd toe, fused 1st and 2nd toes, fused 4th and 5th toes (Figures 2 and 3). The rest of the physical examination was normal with absence of cleft lip or palate. The mother refused any genetic testing. Split-hand/split-foot malformation (SHFM) is a limb malformation characterized by the complete or partial absence of some fingers or toes associated with clefts in the hands or feet with syndactyly [1]. SHFM is inherited in an autosomal dominant or X-linked fashion, and can also result from a sporadic mutation [2].

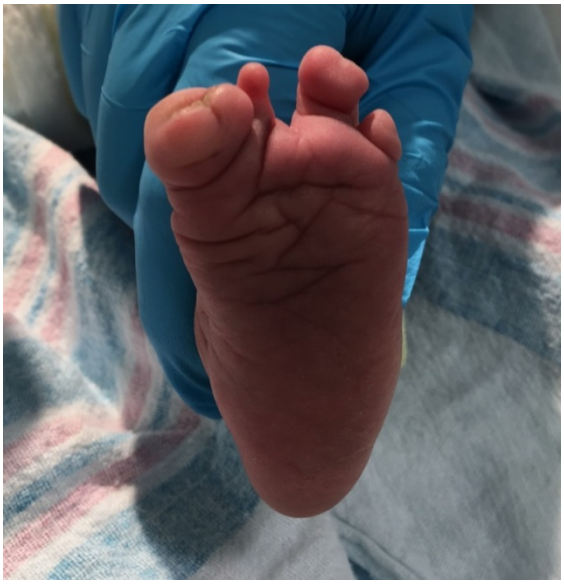

Figure 1: Right foot.

Figure 2: Left foot.

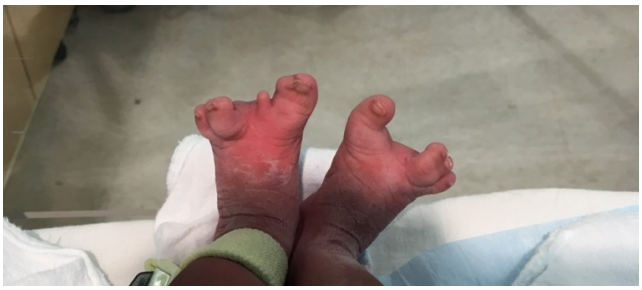

Figure 3: Right and left foot.

In our case, there is no family history documented and we did not perform any chromosomal assessment in order to support SHFM. However, this condition can occur in amniotic band syndrome with involvement of distal limbs as in our case but there are no risk factors of oligohydramnios or leaking amniotic fluid or this maybe a single entity which occurs in any combination of congenital anomalies in infant of diabetic mother [3]. Frequency is estimated at one out of 90000 new-borns and it affects males and females equally [1]. SHFM severity ranges from malformed central fingers or toes to a lobster claw-like appearance of the hands and feet that can be identified on prenatal ultrasonography [1,2]. The diagnosis is clinical and imaging with X-rays can yield other skeletal anomalies. Timely planned plastic

and reconstructive surgery is important to provide improved function and development and a more acceptable aesthetic appearance. Our patient was referred to plastic surgery and rehabilitation for further intervention and management.

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