

Bilateral Foot Skin Nodules in Children: Talar Callosities in 7 Patients and Differential Diagnosis

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Key words: Talar callosities, Pediatric Dermatology, Foot Diseases

Citation: Cutrone M, Grimalt R, Van Gysel D, Nowowiejska J, Piccolo V. Bilateral Foot Skin Nodules in Children: Talar Callosities in 7 Patients and Differential Diagnosis. *Dermatol Pract Concept*. 2025;15(2):4872. DOI: <https://doi.org/10.5826/dpc.1502a4872>

Accepted: September 11, 2024; **Published:** April 2025

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Funding: None.

Competing Interests: None.

Authorship: All authors have contributed significantly to this publication.

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Introduction

Over the past 10 years, we have documented seven cases of talar callosities, all in males aged 6 to 14 years (Figure 1 A-G, Table 1). Of these, four were accompanied by other dermatologic conditions (atopic dermatitis, carotenemia, and psoriasis), while in the remaining three cases, it was an isolated condition.

Case Presentation and Discussion

None of the patients had ligamentous hyperlaxity, and only in one case (case 6, associated with autism spectrum disorder) was it associated with a habit of spending time in a cross-legged position. In only two cases (case 6, where the lesions were particularly thickened and scaling, and case 7, where psoriasis overlapped) did we find it useful to prescribe

topical steroids (mometasone furoate), which led to rapid improvement (but not the disappearance of the talar callosities). Talar callosity is a condition of the foot skin that is little known and probably underdiagnosed. Clinically, it presents as a callosity/thickening typically 2.0 to 2.5 cm in diameter that can vary in its location, from the anterolateral aspect to the dorsum of the feet, usually away from common shoe point of contact [1,2]. It can be associated with smaller callosities over the ipsilateral lateral malleolus, fifth metatarsal base or head, or other bony prominence in the foot. The color is usually that of normal skin. Usually bilateral, it tends to be more prominent on one foot [1]. Talar callosity was also known in the past as “callosity of crossed-legged sitting” or “prayer foot” because it was always considered in relation to praying (similar to Davener’s dermatosis of the back), meditation, and other activities that involve sitting cross-legged such

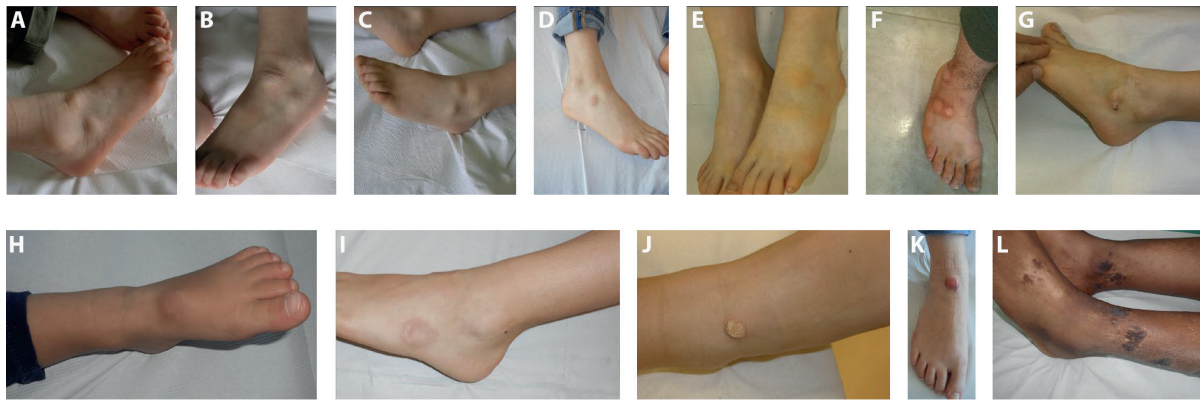


Figure 1. Clinical manifestation of talar callosities and differential diagnoses. A–G: talar callosities; H: deep granuloma annulare; I: superficial granuloma annulare; J: wart; K: keloid; L: eczema.

Table 1. The Summary of our Cases of Talar Callosities.

	Age and Sex	Laterality	Number of lesions	Color	Pain/Itching	Crossed Legs Position	Other Diseases
1	10-year-old male	Bilateral	3	Normal skin	No	No	No
2	8-year-old male	Bilateral	3	Minimal scaling	No	No	Atopic eczema
3	9-year-old male	Bilateral	3	Normal skin	No	No	No
4	11-year-old male	Bilateral	3	Minimal erythema	No	No	No
5	7-year-old male	Bilateral	3	Yellowish	No	No	Carotenemia
6	14-year-old male	Bilateral	3	Erythema with scaling	No	Yes	Autism Spectrum Disorder
7	6-year-old male	Bilateral	3	Erythema with scaling	No	No	Psoriasis

as yoga or eating [1,3]. In children, talar callosity has been described in relation to crossed-legged or kneeling positions to play on the floor [1]. In a series of 26 cases, association with generalized ligament laxity was also reported [2]. The diagnosis is clinical, and the histologic findings are orthokeratosis, hypergranulosis, and dermal papillary fibrosis [1]. The differential diagnosis includes granuloma annulare (mainly in the deep subcutaneous variant, firmer and harder, Figure 1H, 1I), psoriasis (with the typical scales and salmon color), nummular eczema (very itchy and usually present at the same time in other sites, Figure 1L), tinea corporis (which has the typical raised welt), warts (more typically present in plantar region and with typical dermatoscopy, Figure 1J), keloid scar (Figure 1K), and frictional dermatitis artefacta, due to repetitive manipulation of the skin secondary to psychological distress. In our series of cases, the bilaterality already described by the few papers published previously was confirmed, while neither the association with ligamentous laxity (absent in all seven cases) nor that with the crossed-legged position (present and perhaps actually involving only

case 6, suffering from autism and accustomed to sitting in that position for prolonged periods) confirmed. It is reasonable, therefore, that the true cause of talar callosity should be reconsidered and perhaps identified in particular attitudes or foot support patterns of the child during walking and standing. One additional pathogenetic hypothesis may be related to the aforementioned differential diagnosis with frictional dermatitis artefacta, where a compulsive habit of skin rubbing by the patient might play a role in the genesis of the disorder. In any case, talar callosity remains an asymptomatic condition that does not require therapy. However, it is important to be aware of this condition in order to avoid mistakes in the differential diagnosis with other conditions that do require therapy [1].

Conclusions

For the definitive clarification of the underlying cause of talar callosity, more case series will be needed to allow a better understanding of this phenomenon.

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