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CASE REPORT

Pseudo-Ainhum of the Left Hallux Complicated by Osteitis: A Rare Clinical Presentation

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Abstract

Introduction: Pseudo-ainhum is a disorder of unknown etiology, generally congenital and non-progressive. According to one theory, it is caused by in utero constriction of amniotic bands. These constriction bands result in a less aesthetically pleasing foot and lead to long-term neurovascular compromise, potentially resulting in finger amputation. It can occur at any age, regardless of race, and is associated with conditions involving advanced peripheral neuropathy and/or vascular disorders affecting the extremities. Pseudo-ainhum (PA) is characterized by circumferential ulceration of one or more toes and/or fingers, often painless, which can ultimately lead to amputation.

Observation: A 60-year-old Beninese housewife, with no notable medical history, consulted the Dermatology-Venereology department of the Buruli Ulcer Screening and Treatment Center (CDTUB) in Allada for a loss of tissue at the base of the left hallux, which had been progressing continuously for one year with periods of remission. The condition reportedly began over five years ago with a spontaneous deformation of the hallux, initially painless. The patient had consulted a traditional healer, who treated her with topical herbal medicine under occlusion. one or more toes and/or fingers, often painless, which can ultimately lead to amputation. On physical examination, a circular constriction was observed at the proximal third of the left hallux, with an overlying oval-shaped ulceration measuring approximately 1 x 0.5 mm in diameter. The ulcer surface revealed a small opening through which foul-smelling purulent fluid was draining. The diagnosis of pseudo-ainhum of the left hallux complicated by osteitis was confirmed, and a disarticulation was performed (. There was a favorable postoperative outcome after 17 days.

Conclusion: Pseudo-ainhum is a benign condition; it is often considered a clinical sign when it occurs in a syndromic context, particularly in the pediatric population. Awareness of this condition is essential, especially in recognizing its benign nature.

Keywords: Pseudo-Ainhum, Hallux, Left, Osteitis.

1. Introduction

Pseudo-ainhum is a disorder of unknown etiology, generally congenital and non-progressive. According to one theory, it is caused by in utero constriction of amniotic bands. These constriction bands result in a less aesthetically pleasing foot and lead to long-term neurovascular compromise, potentially resulting in finger amputation [1]. It can occur at

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any age, regardless of race, and is associated with conditions involving advanced peripheral neuropathy and/or vascular disorders affecting the extremities [2,3]. Pseudo-ainhum (PA) is characterized by circumferential ulceration of one or more toes and/or fingers, often painless, which can ultimately lead to amputation. The surgical approaches described in the literature are limited. The two procedures reported include either Z-plasty or amputation, depending on the severity of the deformity. We report a case of pseudo-ainhum of the hallux complicated by osteitis.

2. Observation

A 60-year-old Beninese housewife, with no notable medical history, consulted the Dermatology-Venereology department of the Buruli Ulcer Screening and Treatment Center (CDTUB) in Allada for a loss of tissue at the base of the left hallux, which had been progressing continuously for one year with periods of remission. The condition reportedly began over five years ago with a spontaneous deformation of the hallux, initially painless. The patient had consulted a traditional healer, who treated her with topical herbal medicine under occlusion. The onset of pain prompted the healer to perform an incision, which later failed to heal and started oozing profusely. The worsening pain and discomfort prompted further medical attention.

On physical examination, a circular constriction was observed at the proximal third of the left hallux, with an overlying oval-shaped ulceration measuring approximately 1 x 0.5 mm in diameter. The ulcer surface revealed a small opening through which foul-smelling purulent fluid was draining (Figures 1a and 1b).

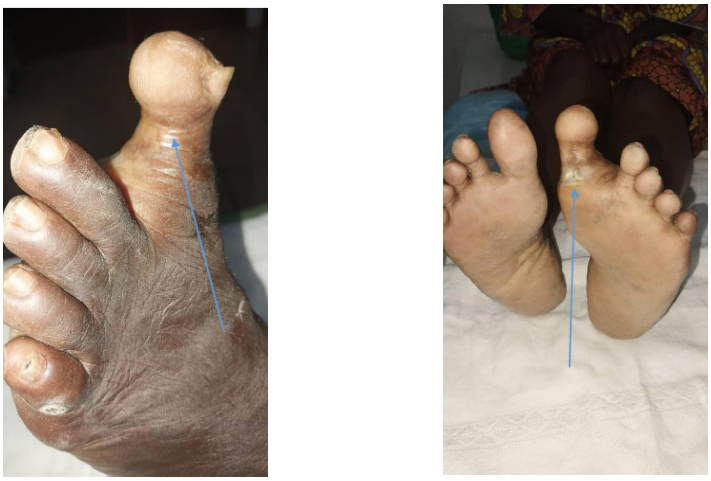

Figure 1a. *Lesion of pseudo-ainhum of the left hallux with a small opening (Figure 1b).*

A complete blood count revealed neutrophil-predominant leukocytosis. A foot X-ray showed severe osteolysis of the proximal phalanx, with a medial fracture of the shaft, head, and body of the distal phalanx, along with erosion of the metatarsal head (metatarsophalangeal osteitis of the hallux).

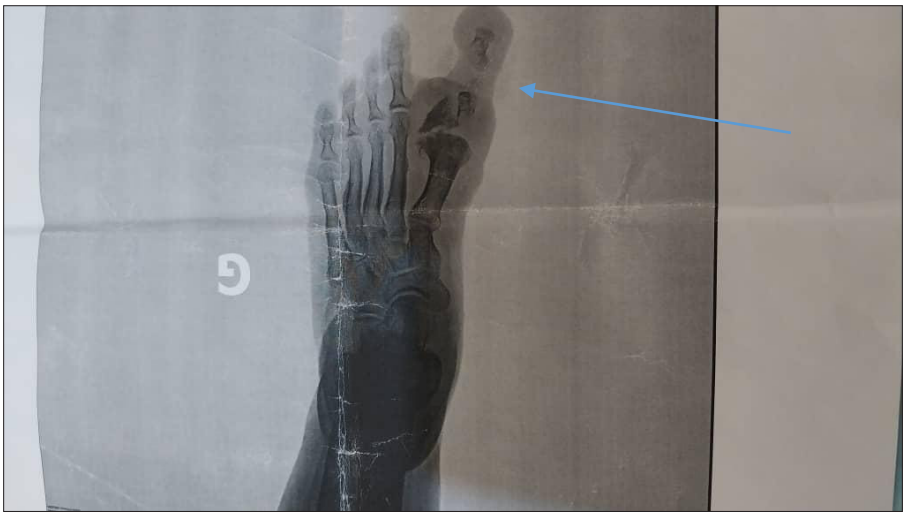

Figure 2. *Metatarsophalangeal osteitis of the hallux.*

The diagnosis of pseudo-ainhum of the left hallux complicated by osteitis was confirmed, and a disarticulation was performed *(Figure 3)*. There was a favorable postoperative outcome after 17 days.

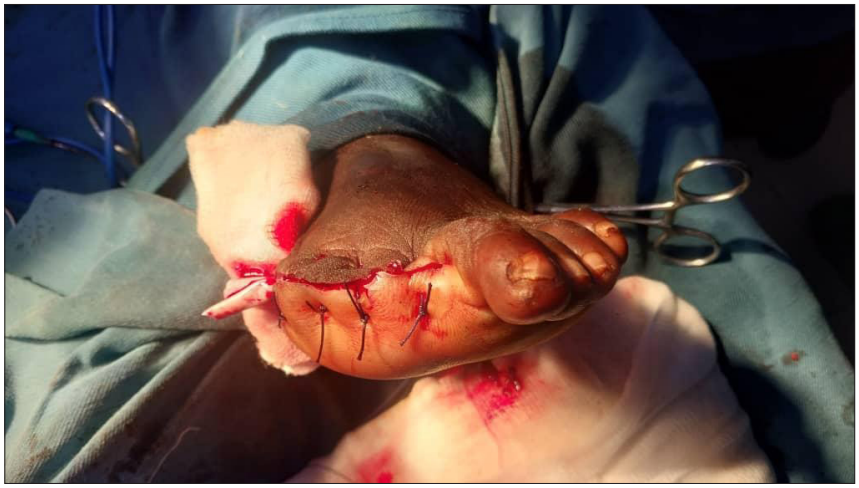

Figure 3. *Surgical amputation of the left hallux.*

3. Argument

The outcome of pseudo-ainhum, like that of ainhum, is ultimately amputation. These two conditions are almost identical, with some differences in their mode of onset and lesion topography [4].

In our patient's case, the lack of information and the absence of early consultation in a specialized center were key factors contributing to this complication. This, has not only exposed her to the risk of foot gangrene but also prolonged her hospitalization—an outcome that could have been avoided [5].

Unlike ainhum or spontaneous dactylolysis, pseudo-ainhum typically occurs in a syndromic context and is often painless, as reported in the literature. It can affect individuals with dark and light skin tones, whereas ainhum is predominantly observed in individuals with dark skin. This condition represents an intersection between dermatology and traumatology, which remains the foundation of its management [6].

4. Conclusion

Pseudo-ainhum is a benign condition; it is often considered a clinical sign when it occurs in a syndromic context, particularly in the pediatric population. Awareness of this condition is essential, especially in recognizing its benign nature.

Conflict of Interest: none

5. References

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