Ainhum: A Spot Diagnosis

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Abstract Ainhum is an acquired progressive condition presenting with a constriction ring around the fifth toe. Classically, it was reported in people of African origin and has been very rarely reported in India. Ainhum when diagnosed and treated early can be prevented from progressing to mutilating deformities. It needs to be differentiated from pseudo ainhum, which may have a precipitating factor, and careful history may reveal a preventable cause. We report a case of ainhum with involvement of the left fifth toe and early involvement of other toes.

Keywords Ainhum • Indian • Z-plasty • Pseudo ainhum

Summary

A 40-year-old female patient presented to us with a 2-month history of a constriction band developing on the medial aspect of her left fifth toe base with distal swelling of the toe and lateral deviation of the digit. History was not suggestive of any precipitating factor. Radiological imaging showed no bony involvement. Because of the rapid progression of the constriction, the patient was operated soon with excision of the band and closure by Z-plasty. We also noticed faint rings around her left fourth toe and right fourth and fifth toes, which had appeared gradually (Figs. 1 and 2).

Constriction rings around the digits can lead to mutilating defects and disability. Rarely seen in Indians and considered a spot diagnosis, ainhum is an acquired constriction ring affecting usually the fifth toe. Originally thought to be a disease of African origin, ainhum has shown presence in India over the

Fig. 1 Left foot with constriction rings on the fourth and fifth toes

Fig. 2 Right foot with constriction rings on the fourth and fifth toes

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last 50 years on rare occasions. The first case of ainhum reported in India was in 1961 [1]. This was followed by a few isolated case reports in the 1960s to 80s [2], supporting the rarity of this condition.

Ainhum is differentiated from pseudo ainhum due to its spontaneous onset without predisposing conditions like trauma, leprosy, scleroderma, and diabetes. Clinical diagnosis includes at least one of the following three criteria: soft tissue constriction, bulbous enlargement of the toes, and thinning or lysis of phalangeal bones, in addition to radiographic confirmation [3].

Many ainhum-like presentations, which are potentially curable, can be seen in clinical practice, and caution needs to be exercised before labeling a case as “ainhum” by taking a detailed history. Involvement of other digits is a real risk in

true ainhum but may be potentially preventable by treating the primary disease in pseudo-ainhum.

Conflict of Interest Nil.

Ethical Approval Not applicable.

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