

A secondary pseudo-ainhum associated to spinocellular carcinoma

Keywords: pseudo-ainhum, amputation, lesions, lymph node, bone resorption, spinocellular carcinoma

Introduction

Pseudoainhum is a rare manifestation of band like constriction progressing into an auto amputation in the affected part.¹ In contrast to ainhum disease pseudoainhum occurs as a result of an identifiable or associated disease process and is independent of skin colour. It is also not limited to the digits and can occur on the trunk of the body.² We report for the first time a pseudoainhum disease associated with a spinocellular carcinoma of the leg.

Case report

A 40-years-old man attended the dermatology department in Hassan II hospital in Fez with a 20years history of non-healing ulcer on the back foot. It wasn't associated with pain. There was no history of diabetes mellitus, and he was a non-smoker. He was mobile and lived independently. The evolution was marked by the extension of the ulcer, and progressed to substance loose leading to spontaneous amputation of more than 1/3rd of the leg. Examination revealed an ulcerative budding stump of the leg (Figure 1). A biopsy was done, and the anatomy pathology revealed a verrucous spinocellular carcinoma. Leg radiography showed a complete destruction of the fibula and tibia and resorption of the remaining bones of the leg. An ultrasound of ganglionic areas and a thoraco-abdominal CT scan didn't reveal any abnormalities (Figure2). After consultation with the traumatologist, the patient had undergone transtibial amputations with lymph node dissection. The anatomy pathology concluded to spinocellular carcinoma. The patient healed and is still alive 3years after the amputation. He didn't present any similar lesions.



Figure 1 Ulcerative budding stump.



Figure 2 Bone destruction and resorption.

Discussion

First described by Messum in 1821, as constricting bands, the pseudoainhum disease wasn't well distinguished from ainhum disease until 1953 by Neumann.³ He also confirmed that amniotic band lesions are different from pseudoainhum. Pseudoainhum has been divided into two sections: primary pseudoainhum and secondary pseudoainhum. Secondary pseudoainhum is an auto-amputation that develops later in life and is a result of an identifiable or associated process. It is independent of skin colour and it is not restricted to the digits and limbs.⁴

Pseudoainhum is under reported in literature, that may be secondary to the lack of clarity of the terminology.⁵ Many reports of secondary pseudoainhum are presented in order to clarify the large panel of association such as papillon-lefevre syndrome, psoriasis⁶ and scleroderma.⁷ Many reports tried to identify aetiology, considering different theories. The most aetiology overlooked causes are: mechanical,² genetic predisposition,⁸ vascular abnormalities.⁹ Pseudoainhum was also described in association with breast cancer.¹⁰ We are reporting the first case of pseudoainhum disease associated with spinocellular carcinoma of the leg. Pseudoainhum may progress in weeks, as it can do it in years as in our case.² It can begin as a superficial lesion of the skin or as a deep groove reaching the bone.¹¹ Extremities are the most described areas to be touched because they are hypo-perfused as well as hyperkeratotic regions.¹² Pain is not

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always described, bone resorption may be seen on radiography.¹²

The diagnosis of pseudoainhum disease is based on medical history and physical examination. No laboratory exams can be done to confirm the diagnosis.

Primary and secondary pseudoainhum progress over 4stages

- a. Formation of a groove or fissure with a hyperkeratotic callus.
- b. Arterial narrowing with eventual cessation of blood flow and oedema formation.
- c. Separation of the bones from the joint with a hyper mobile digit.
- d. Blood-less auto-amputation.¹³

Unfortunately, until now, there is no consensus for the management of pseudoainhum. Many attempts reported liver oil and nicotinic acid. Surgery and etretinate had also been reported.^{14,15}

Conclusion

Secondary pseudoainhum is a rare disease but it can be very traumatic and painful, which can impact the quality of life of the patient. Many possible syndromes or diseases may be associated with Secondary pseudoainhum. A detailed work-up is needed to clarify all possible associations. If done, the therapeutic management might be improved.

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Conflict of interest

The author declared that there are no conflicts of interest.

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