

CASE REPORTS

Zosteriform Cutaneous Leiomyoma. Satisfactory Treatment With Oral Doxazosin

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Abstract. We report a 50-year-old man that presented a zosteriform cutaneous leiomyoma in the left facial region, intensely painful, that showed great improvement after the administration of a daily dose of 4 mg of oral doxazosin. The therapy was well tolerated and did not present any associated adverse effect. In the English medical literature only two cases successfully treated with doxazosin have been reported.

Key words: zosteriform leiomyoma, doxazosin.

LEIOMIOMA CUTÁNEO ZOSTERIFORME. TRATAMIENTO SATISFACTORIO CON DOXAZOSINA ORAL

Resumen. Describimos el caso de un paciente varón de 50 años de edad que presentaba leiomioma cutáneo zosteriforme de región facial izquierda, intensamente doloroso, y que obtuvo mejoría clínica espectacular tras la administración diaria de 4 mg de doxazosina oral. Este tratamiento fue bien tolerado y no presentó ningún efecto adverso asociado. En la literatura médica de habla inglesa se han publicado sólo dos casos tratados con doxazosina que demostraron excelente resultado terapéutico.

Palabras clave: leiomioma zosteriforme, doxazosina.

Case Description

We describe a 50-year-old man with a history of type 2 diabetes mellitus for which he was receiving metformin and acarbose. He was referred to our clinic because of papulonodular lesions on the left side of the mandible that had appeared 30 years earlier. These lesions caused him intense pain on exposure to cold air and when he was shaving. Physical examination revealed an indurated plaque measuring approximately 11.5 × 8 cm and composed of nodules of different sizes. The nodules extended from the left oral commissure to the neck region and were distributed metamerically (Figure 1A). No other members

of his family were affected by this condition. Nuclear magnetic resonance imaging of the face revealed a slight increase in the thickness of the skin and there was no involvement of the subcutaneous cellular tissue, muscle, or bone.

Histopathology of one of the nodules revealed a tumor composed of disordered bundles of smooth muscle fibers interlaced with bundles of collagen infiltrating the full thickness of the dermis (Figure 2). These findings confirmed the diagnosis of piloleiomyoma.

Owing to the size and location of the lesion, we ruled out surgery and started treatment with oral doxazosin, an α -1 adrenergic blocker, at a dose of 4 mg/d. After 2 weeks of treatment, the size and induration of the leiomyoma had improved and the patient reported that the pain had disappeared completely (Figure 1B).

He is currently taking maintenance treatment with oral doxazosin at 4 mg/d and, 6 months after the initial consultation, he remains symptom-free with an excellent quality of life and no adverse effects of medication. The patient reported that the condition improved during hot weather; therefore, we proposed continued therapy for 8 months of the year, with a break between June and September.

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Figure 1. (A) Before treatment: multiple nodules of different sizes with a zosteriform distribution on the left side of the face. (B) After 2 weeks of treatment: slight improvement in the thickness and induration of the leiomyoma.

Discussion

Leiomyomas are benign tumors of the smooth muscle that stem from the arrector pili muscle, the muscular layer of the blood vessels, and the tunica dartos, labia majora, or nipple. There are 3 types: piloleiomyoma, dartoic leiomyoma, and angioleiomyoma. Piloleiomyoma lesions appear as isolated elements, in groups, or with a metameric distribution. They can occur in different locations such as the extensor surfaces of the limbs, the trunk, or the face. The most common clinical presentation is in the form of solitary lesions. The lesions often cause pain in response to cold or pressure.¹

The treatment of choice in isolated cases is surgical removal; however, multiple lesions require extensive resection and local recurrence is very common. In patients who experience intense pain and for whom surgery does not guarantee favorable results, different medical treatments have been used, including nifedipine,² oral nitroglycerin, β -blockers, topical hyoscine,³ and

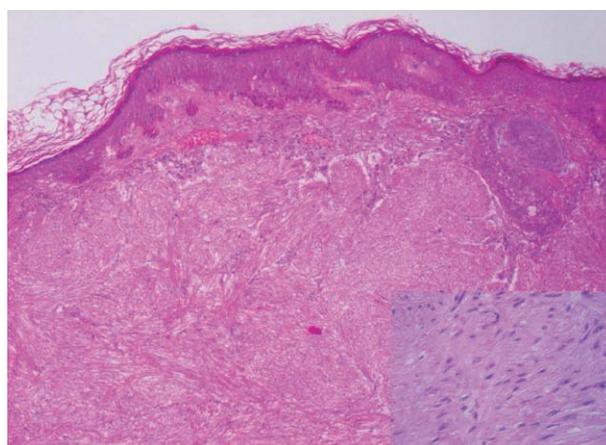


Figure 2. Irregularly distributed bundles of smooth muscle fibers interlaced with bundles of collagen in the dermis (hematoxylin-eosin, $\times 100$). Lower right panel: detailed view of the bundles of smooth muscle fibers (hematoxylin-eosin $\times 400$).

gabapentin,⁴ or techniques such as sympathicolysis or iontophoresis⁵.

It has been suggested that these symptoms are produced by pressure on the nerves inside the leiomyoma itself or by muscle contraction mediated by α -adrenergic receptors,¹ which can be found in the arrector pili muscle. Therefore, drugs such as doxazosin (an α -1 adrenergic blocker) that are capable of blocking these receptors can improve the symptoms by preventing the contraction of smooth muscle fibers.

Doxazosin is widely used in clinical practice for the chronic treatment of hypertension and benign prostatic hypertrophy. It is well tolerated and has few side effects (orthostatic hypotension, dizziness, headache, and dyspepsia). To date, only 2 cases of treatment with this drug have been reported in the English-language medical literature. The results were satisfactory and there were no significant adverse effects.⁶

To conclude, we would like to highlight the excellent clinical response we observed with oral doxazosin in a patient suffering from intense pain resulting from zosteriform cutaneous leiomyoma and to stress the good tolerance of the drug and the lack of associated adverse effects.

Conflicts of Interest

The authors declare no conflicts of interest.

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