Clinical History

The patient was a 28-year-old woman with no past history of interest, who was seen for asymptomatic papules that had been present on the dorsum of the fingers since she was 12 years old. The patient came to the clinic with a sister who had similar lesions on the same area.

Physical Examination

On physical examination, there were numerous, flat papules a few millimeters in diameter, the color of the surrounding skin. The lesions were relatively symmetrical on the dorsal aspect of the proximal and middle phalanges of the fingers (Figure 1) and between the first and second fingers of both hands (Figure 2). The palms were not affected and there were no lesions at other sites.

Histopathology

Histology revealed a dermis with numerous glandular structures surrounded by sclerotic and homogeneous collagen (Figure 3). At higher magnification, the glandular structures were seen to be formed of cells with a pale or pink cytoplasm, arranged in nests and tubules. The tubular areas were formed by a double layer of cuboidal cells around a central lumen lined by a dense eosinophilic cuticle. Some of these ducts had a tadpole tail-like epithelial prolongation.

What Was the Diagnosis?
Diagnosis

Acral syringomas.

Clinical Course and Treatment

The lesions were completely asymptomatic and in view of the benign nature of the tumor it was decided not to perform any treatment.

Discussion

Syringomas are benign adnexal tumors. The results of immunohistochemical and ultrastructural studies seem to indicate that these tumors arise from the luminal (cuticular) cells of the intraepidermal part of the eccrine excretory duct (acrosyringium).1

Syringomas present clinically as small, firm, asymptomatic, skin-colored or slightly yellowish papules a few millimeters in diameter; they are usually multiple. They are more common in women, develop progressively from the age of puberty, and there may be a certain genetic predisposition. The most common sites are the lower eyelids, cheeks, axillas, lower abdomen, and genital region. Palpebral syringomas are particularly common in Down syndrome. There are a number of clinical variants. Eruptive syringomas, also called eruptive hidradenomas of Jaquet and Darier, usually develop during the first decade of life, appearing in large numbers and in recurrent outbreaks on the anterior part of the neck and on the chest and abdomen. Linear or plaque syringomas are distributed in a unilateral zosteriform pattern. Other, less-common clinical forms include the solitary syringoma, which appears as a single, small, smooth-surfaced papule on the face or affecting a specific anatomic region, such as the buttocks, scalp, ankle, or the hands and feet. Syringomas that arise in the distal areas of the body are called acral syringomas. These sites are extremely rare, with only 4 cases reported in the literature.1-4 The differential diagnosis includes epidermodysplasia verruciformis, acrokeratosis verruciformis, lichen nitidus, and deposition diseases such as acral persistent papular mucinosis.

Histologically, syringoma is a small, symmetrical, and well-defined lesion that occupies the upper half of the reticular dermis. The surrounding stroma is sclerotic, formed of thick, compact, homogeneous bundles of collagen. The epithelial component of the proliferation is formed of ducts and cysts. Typically, the ducts do not communicate with the epidermal surface or with the pre-existing follicular infundibula. These ducts and small tubules are lined by a double layer of cuboidal or flattened cells and sometimes contain a basophilic granular material. Eccentric epithelial prolongations can be seen arising from the walls of many of the ducts; these prolongations typically have a comma or tadpole-tail shape. Apart from ducts, it is also common to find small cords or solid islands of vacuolated cells in syringoma; these cells form part of the epithelial component of the neoplasm. There are no histological differences between common and acral syringomas, though a smaller number of ducts and a larger epithelial component in the form of cords and solid nests have been observed in some cases of acral syringoma.1

As syringoma is a benign tumor, treatment is not required except for purely cosmetic reasons. Patients may benefit from superficial electrocoagulation or cryotherapy with liquid nitrogen. Improvement has been reported with trichloroacetic acid and with topical retinoids. At the present time, carbon dioxide laser is considered to provide the best treatment.5

Conflicts of Interest

The authors declare no conflicts of interest.

References