



Figure 2 Image of the lesions obtained with a polarized light dermatoscope attached to a Canon Powershot A160 camera using the DermLite Foto attachment (3Gen LLC). Rosettes (indicated by a white circle in the lesion on the left; a larger number of rosettes are seen in the central area of the lesion on the right) are in evidence, along with irregularly shaped vessels and a clear rainbow pattern.

why the pattern is found in other types of skin lesions with active vascularization, such as our patient's scars.

When first described in actinic keratosis, rosettes were characterized as "4 white points arranged as a 4-leaf clover."² The sign has since been reported in other skin lesions such as squamous cell carcinoma, basal cell carcinoma, melanoma, and lichenoid keratosis.³⁻⁷ Rosettes are believed to be the result of an optical effect caused by interaction between polarized light and follicular openings.⁶

The rainbow pattern and rosettes are not considered to be specific dermoscopic features of the lesion. Since it appears that they are secondary effects of the interaction between different skin structures and polarized light, they will likely be observed in various types of skin lesions.

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Dermoscopic Rainbow Pattern in Atypical Fibroxanthoma[☆]

Patrón dermatoscópico en arcoíris en fibroxantoma atípico

We present the case of a 73-year-old man with a history of non-insulin-dependent diabetes mellitus, arterial hypertension, abdominal aortic aneurysm, and hypercholesterolemia. He was referred to our department for evaluation of a tumor on the scalp that had appeared 6 weeks earlier. The tumor was pink with some reddish and violaceous areas, had a maximum diameter of 18 mm and distinct borders, was nonulcerated, and displayed mild scaling in the center (Fig. 1).

Dermoscopic examination was performed with a polarized light contact dermatoscope (DermLite Foto, 3Gen LLC) using ultrasound gel as the liquid interface. The dermoscopic images showed a round, symmetrical lesion with a reddish peripheral area from which atypical, irregularly distributed, out-of-focus blood vessels—mostly linear and unbranched—extended in a vaguely radial pattern (Fig. 2). Most of the tumor surface displayed rainbow-patterned areas, often arranged in parallel to the linear, irregular blood vessels. None of the criteria specific to melanocytic lesions were observed. Shiny whitish areas were observed between the rainbow-patterned structures, and scales were visible on the surface.

Complete surgical excision of the lesion was performed. Histologic examination revealed a nodular cell proliferation in the dermis comprising aberrant spindle-shaped cells, epithelioid cells, multinucleated giant cells, and abundant mitotic figures. Hemorrhagic zones were observed in some areas. Immunohistochemistry was positive for vimentin, CD68, and CD10 and negative for CD31, CD34, FVIII, S100,

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Figure 1 Tumor on the scalp and nearby actinic keratoses.

cytokeratins, epithelial membrane antigen, desmin, and smooth muscle actin. The proliferative index, measured using Ki-67, was between 10% and 20%. A diagnosis of atypical fibroxanthoma was established on the basis of the histopathologic findings.

Atypical fibroxanthoma is a rare low-grade tumor. It usually develops on chronically sun-damaged skin, especially on the head or neck of elderly patients.¹ Clinically, it presents as a single, rapidly growing nodule. Differential diagnosis should include basal cell carcinoma, squamous cell carcinoma, Merkel cell carcinoma, and melanoma. Lymph node metastases are rare and distant metastases are very rare.

Only 4 dermoscopic observations of this rare tumor have been described in the literature. An atypical vascular pattern with irregularly distributed polymorphic vessels—including linear, punctate, globular, tortuous, and

arborizing vessels—was observed in 3 cases.² Whitish areas were observed in 2 of these patients and heterogeneous hyperpigmentation in the other. The remaining case was a collision tumor associated with a basal cell carcinoma, in which the atypical fibroxanthoma component appeared as a hemorrhagic, ulcerated lesion with small telangiectasias.³

In our patient, the most striking dermoscopic finding was the rainbow pattern in the center of the tumor. Although the rainbow pattern was initially considered to be a characteristic feature of Kaposi sarcoma, it has since been observed in various conditions, including melanoma, stasis dermatitis, lichen planus, hemosiderotic dermatofibroma, and basal cell carcinoma.⁴⁻⁷ The rainbow pattern is an optical phenomenon that can only be observed with a polarized light dermoscope (either contact or noncontact). It occurs when light in different states of polarization interacts with the structures of the lesion.⁶ Bugatti et al.² specified that a contact dermoscope was used in the 3 cases they reported but did not state whether or not the device used polarized light, without which the rainbow pattern cannot be observed.

The shiny white structures can take the form of shiny white streaks (also known as chrysalis structures), shiny white areas, or rosettes. These structures can be observed much more clearly with a polarized light dermoscope. The presence of shiny white structures has been described in various benign and malignant tumors—including melanoma, Spitz nevus, dermatofibroma, actinic keratosis, squamous cell carcinoma, and basal cell carcinoma—and is indicative of an increase in dermal collagen.^{8,9}

All dermoscopic observations of atypical fibroxanthoma reported to date have described an atypical vascular pattern characterized by polymorphic vessels interspersed with whitish areas. This dermoscopic pattern is nonspecific and indicative of chaotic neoangiogenesis during growth. It is also seen in other tumors that are clinically similar to atypical fibroxanthoma, such as squamous cell carcinoma, Merkel cell carcinoma, and amelanotic melanoma.¹⁰ Since the rainbow pattern is also found in a number of these tumors, this finding alone is not sufficient to establish a dermoscopic diagnosis.

In summary, we present the first dermoscopic observation of the rainbow pattern in an atypical fibroxanthoma, thereby adding atypical fibroxanthoma to the list of entities that can present this finding. A vascular pattern characterized by polymorphic vessels is a constant finding in all reported cases of this tumor.



Figure 2 Dermoscopic image, obtained using a polarized light contact dermoscope, showing irregular blood vessels in the peripheral area and a rainbow pattern in the center.

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Primary Anetoderma Associated With Primary Sjögren Syndrome and Anticardiolipin Antibodies[☆]

Anetodermia primaria asociada a síndrome de Sjögren primario y anticuerpos anticardiolipina

Anetoderma is a rare acquired chronic skin condition that involves the loss of elastic fibers. There is no specific effective treatment.^{1,2} We present the case of a patient with primary anetoderma associated with both primary Sjögren syndrome and anticardiolipin antibodies. Biopsy showed an acute inflammatory infiltrate observed in the reticular dermis. The condition was treated with colchicine and dapsone.

The patient was a 21-year-old woman with a history of depression and bulimia, for which she was receiving effective duloxetine treatment; she had no recent changes in weight. She was first referred to our hospital's dermatology department in June 2009 for painful 5-mm erythematous papules that had appeared gradually and were progressing to soft, normal-colored patches on the upper arms and upper third of the back; they measured approximately 1 × 2 cm² in size (Fig. 1). She reported no past history of miscarriage, infertility, or vascular thrombosis.

The patient had been referred by the rheumatology department, where she had consulted for dry mouth and dry eyes. Her Schirmer test was positive (3 mm in 5 minutes for the right eye and 5 mm in 5 minutes for the left). Sialometry showed low salivary secretion (0.3 mL unstimulated and 6.1 mL stimulated). Salient analytical findings included the following: anti-nuclear antibody titer, 1/320, with a speckled pattern; anti-Ro/SS-A and anti-La/SS-B antibodies; rheumatoid factor, 56 IU/mL (reference range, < 20 IU/mL); complement factor C4, 86.6 µg/mL (reference range, 120–360 µg/mL); and immunoglobulin M anticardiolipin antibodies, 6.73 MPL/mL (reference range, < 4.6 MPL/mL). Serologic tests for human immunodeficiency virus, anti-beta-2-glycoprotein I antibodies, and lupus anti-

coagulant were all negative. These findings had led the rheumatology department to a diagnosis of primary Sjögren syndrome; antiphospholipid syndrome and lupus erythematosus were ruled out.

Biopsy of the skin lesions revealed a perivascular and interstitial inflammatory infiltrate consisting of lymphocytes and histiocytes, with abundant neutrophils and eosinophils, in the reticular dermis (Fig. 2). Staining for elastic fibers showed fragmentation and loss of elastic fibers in the papillary and reticular dermis (Fig. 3). These findings led to a diagnosis of primary anetoderma in a patient with primary Sjögren syndrome.

Treatment was started with colchicine (1.5 mg/d) and the lesions stabilized; however, treatment was suspended after 2 months due to gastrointestinal intolerance. New, painful erythematous lesions appeared subsequently, and dapsone treatment (50 mg/d) was started. This was well tolerated and the dosage was increased to 100 mg/d; symptoms improved, and the patient's condition became stable. In December 2011, treatment was discontinued due to paresthesia of the hands. Electromyography findings were compatible with carpal tunnel syndrome, and dapsone-induced neuropathy was thus ruled out. Since no new lesions had developed, treatment was not resumed and the patient was still stable at the time of writing.



Figure 1 Skin-colored papules with a wrinkled surface on the upper third of the back, suggestive of anetoderma.

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