

## “Oak-leaf-like” Loop Vessels in Super-high Magnification Dermoscopy of Basal Cell Carcinoma

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### Case Presentation

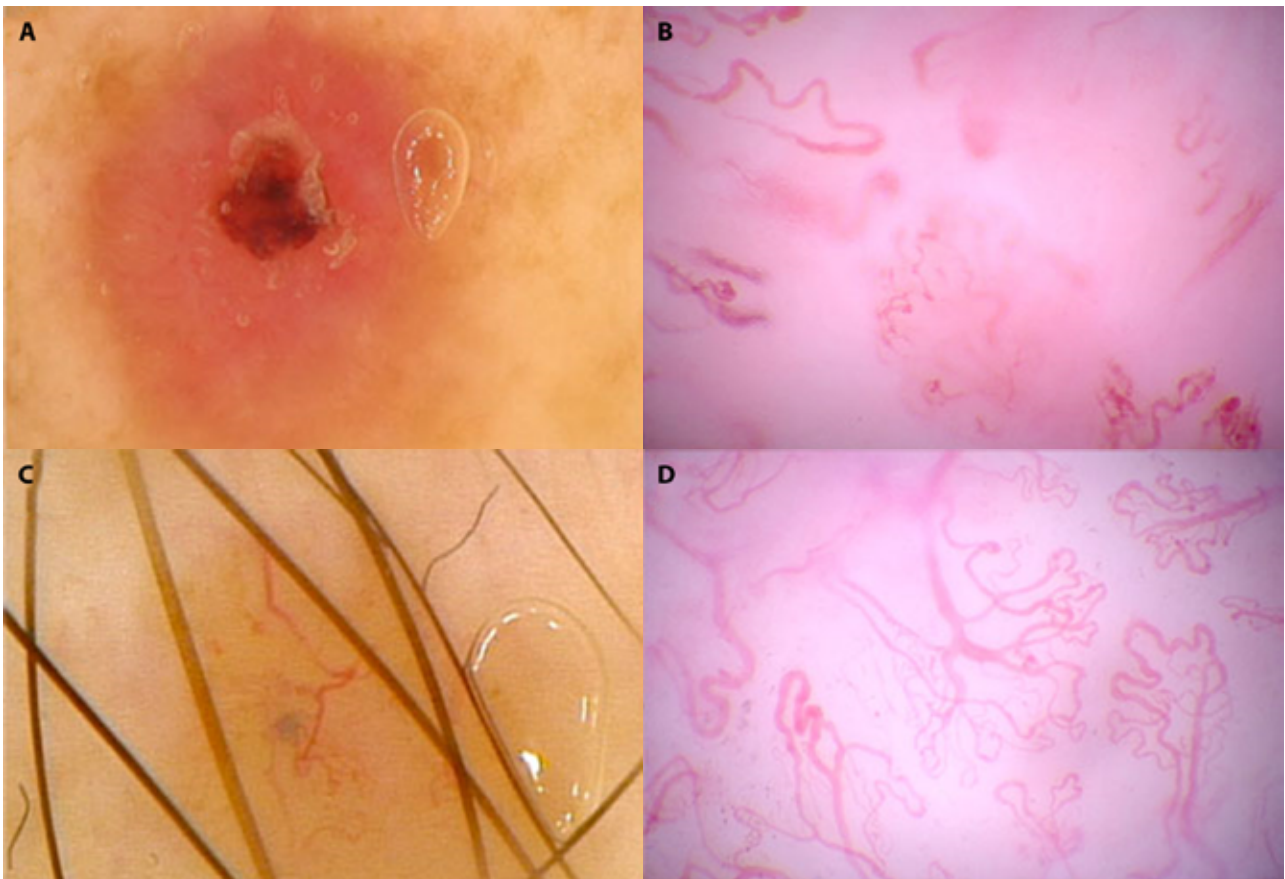
An 81-year-old patient presented with a 5-mm red firm ulcerated nodule of the skin on his back. Dermoscopy revealed ulceration in the center and linear irregular vessels distributed on the lesion’s periphery (Figure 1A). Optical super-high magnification dermoscopy (OSHMD) revealed looped vessels with extremely branched loops resembling oak leaves, which were distributed throughout the entire lesion (Figure 1B). The patient underwent excision of the lesion and diagnosis of nodular basal cell carcinoma (BCC) was established.

A 49-year-old patient presented with a 4-mm plaque on the abdomen. Dermoscopy (Figure 1C) showed an image typical for BCC. OSHMD showed surprisingly numerous loop vessels in form of “oak leaves“, distributed across the entire lesion as well as in the previous case (Figure 1D). The

established diagnosis was superficial BCC. The consent to publish data has been obtained from the patients.

### Teaching point

In some cases, the diagnosis of BCC can be challenging. Therefore, the detailed dermoscopy, including analysis of morphology of the vessels is of the greatest importance. According to the literature, arborizing vessels are the most common type of vessels followed by the short fine tele-angiectasias, while the looped vessels are a minor vascular feature of BCC [1,2]. I have found looped vessels and named them “oak-leaf-like” because of their striking similarity to an oak leaf. As each of the images concerned a different subtype of BCC, it might be presumed that such complicated vessels do not depend on the thickness of the lesion.



**Figure 1.** Dermoscopy and super-high magnification dermoscopy images of basal cell carcinoma cases presented in the manuscript. (A) Ulceration in the center of the lesion and linear irregular vessels distributed on the red homogenous background on the periphery of the lesion (20x magnification). (B) Super high magnification dermoscopy (400x magnification) demonstrating looped vessels with extremely branched loops resembling “oak leaves”. (C) Arborizing vessels and short fine telangiectasias with a blue-gray globule (20x magnification). (D) Numerous loop vessels in the form of “oak leaves“ (400x magnification). All images taken by the Foto Finder GmbH.

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