

## Dermoscopic Features of a Digital Myxoid Cyst

Dear Editor,

We report a case of a patient admitted to our Department presenting a typical digital myxoid cyst.

A 54-year-old man was referred by his general practitioner to the Department of Dermatology at our hospital due to the presence of an asymptomatic lesion on the third right toe. Physical examination revealed a rounded, red-bluish lesion in the eponychium less than 0.5 cm in diameter with a cystic appearance that secondarily caused a longitudinal depression in the nail plate (Figure 1).

Dermoscopy showed arboriform telangiectasias over white, bluish, and reddish-orange diffuse areas (Figure 2, a). Direct needle puncture with a 25-gauge needle and drainage was performed showing a clear gelatinous material (Figure 2, b), confirming the diagnosis of digital myxoid cyst. No recurrence was seen during the 9-month follow-up period.

A digital myxoid (or mucous) cyst is a benign recurrent cystic lesion of less than 1 cm in diameter and rounded or oval morphology typically located at the distal interphalangeal joint (DIJ) or eponychium in the digits. Digital myxoid cysts have a higher incidence in adult women and are more likely to be found on the fingers than on the toes, especially on the index finger of the dominant hand. Typically, digital myxoid cysts are recognized as unique asymptomatic lesions

and do not require treatment, although there can be multiple lesions in case of osteoarthritis (1,2).

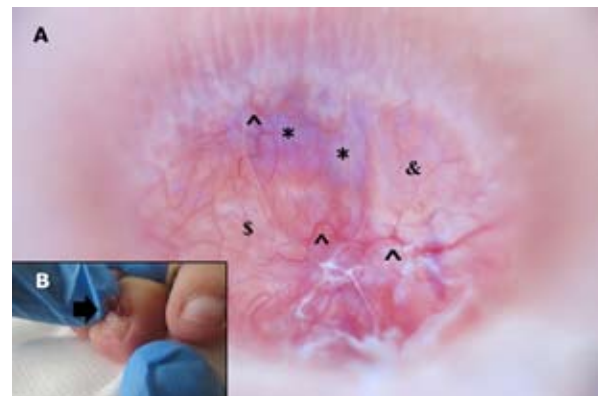
Its etiology and pathogenesis remains unclear, although some theories indicate that myxoid cysts could appear as a result of a mucoid degeneration of the connective tissue, the exit of synovial fluid from the DIJ capsule, repetitive trauma, the herniation of tendon sheaths or synovial linings associated with degenerative joint diseases and osteophytes in the elderly, or due to an overproduction of mucin by fibroblasts (1,3,4). Furthermore, there is no treatment consensus nor a treatment algorithm for its management, although surgical excision has shown high cure rates.

Dermoscopy is a non-invasive imaging technique that allows accurate diagnosis of the digital myxoid cyst. As reported in this case, dermoscopy examination facilitates identification of telangiectasias following different vascular patterns (arboriform, polymorphic, punctate, or linear vessels), reddish-violet lagoons, ulceration, and a bright-whitish reticulum that could be related to an increase in collagen (5,6).

Differential diagnosis mainly includes ganglion, Heberden's nodes associated with osteoarthritis, glomus tumors, and dermatofibromas (5). Treatment options range from observation (when there is no



**Figure 1.** Red-bluish lesion in the eponychium.



**Figure 2** (a) and (b). Dermoscopy of the lesion.

symptomatology), puncture and drainage of the cyst and corticosteroid injections to surgical intervention with reported healing rates of 95%. Sclerotherapy, cryotherapy, CO<sub>2</sub> laser vaporization, infrared coagulation, caustic elimination, and manual compression of the cyst can also be used. Within non-surgical measures sclerotherapy has reported a 77% healing rate, followed by cryotherapy (72%), corticosteroid injections (61%), and manual compression (39%) (1,7).

In summary, we reported a case of a digital myxoid cyst in an adult patient presenting with its main characteristics and typical location. This cystic lesion must be considered in the differential diagnosis with other benign tumors. Dermatoscopy should be an essential diagnostic tool and must be taken into account in cases of doubtful diagnosis. Its value in the evaluation of tumor processes is already well-known but it cannot be ignored when assessing other skin lesions or cutaneous infections.

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