Ganglions around the fingers are very common. Eccrine spiradenoma is rare in the fingers and has not been described as cystic when appearing in the hand. Eccrine spiradenoma is a benign sweat gland tumor, which can rarely undergo change to a malignant variety. We report on a case of cystic eccrine spiradenoma that mimicked a ganglion in terms of its clinical examination and investigation.

CASE REPORT

A 46-year-old right-hand-dominant man on a disability benefit was referred to our unit with a 4-year history of a lump on his volar left index finger, just proximal to his distal interphalangeal joint. He recalls it appearing after a fishing hook injury that was followed by infection of the wound, which eventually healed with a lump. The patient incised the lump several times and reports at one time expressing pus out of it. After this, the lump recurred and the patient finally consulted his primary care physician who treated it with a course of oral antibiotics. When this made no difference, the primary care physician incised it and expressed clear fluid suggestive of a ganglion. Once again the lump slowly reaccumulated and grew in size. The patient reported no pain except if it was knocked firmly. The size of the lump made gripping objects awkward, and this was the reason for his referral to our unit. On examination, the lump was 2 cm wide, 1.5 cm long, and 1 cm in maximum depth and lay on the volar side of the left index finger proximal to and involving the distal interphalangeal crease. It had the consistency of a ganglion. The overlying skin was thin, especially on the radial side. Clinically it was not tethered to the flexor apparatus and an ultrasound examination confirmed this and suggested that the lump was consistent with a ganglion.

A decision was made for an excisional biopsy of this presumed ganglion. Intraoperative findings revealed a well-encapsulated multilobulated mass with one lobule filled with thick yellow fluid that looked like pus, another filled with clear jelly-like material, and the last being firmer and bloodstained (Fig. 1). Histological and microbiological examination of the yellow fluid revealed cell debris and white blood cells, but no bacterial growth. Further histopathological exam-
amination of the entire specimen revealed an appearance consistent with eccrine spiradenoma (Figs. 2–4).

SUMMARY

Eccrine spiradenoma was first described in 1965 by Kersting and Helwig. It usually occurs as a solitary nodule but cases with multiple tumors have been reported. The tumor is typically painful and tender. Under low magnification, a well-defined connective tissue capsule surrounds the tumor. High magnification reveals 2 types of cells organized in tubules or alveoli that sometimes resemble the sweat gland alveoli.

Only 10 cases have been reported in the hand, with even fewer in the fingers. Seven percent of Kersting and Helwig’s cases had a microscopic appearance of cyst-like lymphatic spaces, but there are no cases reported in the hand with a cystic consistency on gross appearance. The clinical consistency of a mass is an important parameter in the workup toward a correct diagnosis.

In our patient, despite a history of a fishing injury and subsequent infection, features of the clinical presentation suggested a ganglion at the top of our preoperative differential diagnosis. The intraoperative finding of 3 lobules with differing consistencies was unusual, but despite the differences in gross appearance, histological examination revealed eccrine spiradenoma with a cystic component. It is important to remember that although ganglions are by far the most common soft tissue lumps appearing in the fingers, other pathological conditions can also be

Fig. 1. Intraoperative picture of the mass during removal.

Fig. 2. Picture of the preserved, paraffin-embedded tissue block. The clear-tan area is solid and the dark brown area is cystic.

Fig. 3. Low magnification shows the cystic and cellular areas. Thick and thin arrows point toward the cellular and cystic sides of the tumor, respectively.

Fig. 4. High magnification shows the duct arrangement of the cells as indicated by the arrows.
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...found. Because of its location and the fact that there was a well-defined capsule, we decided to continue with excisional biopsy rather than incisional biopsy. However, surgery for a presumed ganglion that intraoperatively reveals a sinister appearance, especially in a more proximal location, may well require a change of operative plan and discussion with a tumor surgeon. Given the fact that malignant transformation can occur in eccrine spiradenoma, long-term follow-up for any evidence of recurrence is recommended.

**CONCLUSIONS**

This case report highlights the need for vigilance when managing seemingly benign cystic lumps in the hand. Depending on the particular size and location in the hand, the treatment plan may need to be altered to allow for appropriate excision margins and reconstructive options, if the intraoperative findings suggest something other than a benign ganglion.

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