

Asymptomatic translucent dome-shaped cystic nodule on the finger

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A 44-year-old woman presented with an asymptomatic papule on her finger (Figure). She reported no pain or trauma at the site. *What is your diagnosis?*



Figure 1. Small translucent papule overlying the distal interphalangeal joint on the fifth finger.

DIAGNOSIS: Digital mucous cyst.

Digital mucous cysts are usually found on the dorsum of the fingers, most commonly on the distal phalanx. Rarely, lesions can present on the toes. The cysts appear bluish and when

punctured drain a clear gelatinous material. Two different entities have been described. One involves the base of the nail. These lesions can be increasingly destructive due to pressure on the nail matrix, which causes a grooved nail or depressed nail deformity. The second entity overlies the distal interphalangeal joint (Figure) and is related to the underlying joint ganglion.

The etiology of these lesions is debated. Oftentimes, a pedicle connecting the cyst to the underlying adjacent joint space can be demonstrated if methylene blue is injected into the distal interphalangeal joint (1). Other lesions are thought to be the result of a degenerative process.

Hand surgeons are best equipped to deal with these lesions since the best treatment is surgical exploration and removal. Historically, repeated puncture and drainage has successfully eradicated these lesions in 72% of patients (2). However, patients are advised not to puncture and drain the cysts themselves since some do connect to the underlying joint and there is a risk of infection that could lead to joint destruction. Injection of a sclerosing agent into the cyst has been used successfully by some authors (3). Recently, a surgical flap procedure has been described that eradicated 92% of lesions on the fingers (4).

1. de Berker D, Lawrence C. Ganglion of the distal interphalangeal joint (myxoid cyst): therapy by identification and repair of the leak of joint fluid. *Arch Dermatol* 2001;137(5):607–610.
2. Epstein E. A simple technique for managing digital mucous cysts. *Arch Dermatol* 1979;115(11):1315–1316.
3. Audebert C. Treatment of mucoid cysts of fingers and toes by injection of sclerosant. *Clin Exp Dermatol* 1986;11(5):510–513.
4. Lawrence C. Skin excision and osteophyte removal is not required in the surgical treatment of digital myxoid cysts. *Arch Dermatol* 2005; 141(12):1560–1564.

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