Bilobed flap in treatment of digital mucous cysts: long-term follow-up
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Citation

Abstract
The use of a bilobed flap in the treatment of mucous cysts of the digits was described by the senior author (ACC) in 1999. We present the long-term follow-up results. Eleven patients had 12 cysts excised. One patient had previous excision without a flap, with recurrence. At ten-year average follow up none has recurred, and all patients are pleased with the cosmetic appearance.

INTRODUCTION
The digital mucous cysts were first described by Hyde in 1882. A score or more of treatment options have been tried, but recurrence rates as high as 36% have been reported. In our experience, degeneration of the underlying joint is the major aetiological factor, and therefore debridement of any osteophyte at excision will help reduce recurrence, as also suggested by Eaton et al. The attenuated skin over the cyst is difficult to dissect off the cyst, and is of poor quality hence the suggestion of resurfacing with a rotation flap. We present the long-term follow-up results in eleven patients at an average follow up of ten-years (range, 7-12 years).

PATIENTS AND METHODS
Twelve mucous cysts were excised in 11 patients by one surgeon (ACC). There were seven female and four male patients with an average age of 59 years (range, 50-75 years). All digits were represented, however the index and middle fingers were affected in four cases each. The dominant hand was affected more often (6:5). One patient had previous simple excision with recurrence.

In each case the cyst was excised complete with the overlying attenuated skin, and the dorsal osteophyte was debrided. The resultant skin defect was closed by means of a local bilobed flap as demonstrated in the figure.

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The patients were contacted and invited to attend a clinic on a choice of dates for assessment. They were examined and questioned on recurrence, cosmetic appearance, any nail growth disturbance, and their overall view of the outcome. The range of joint movement was also measured.

RESULTS
Eleven patients had 12 cysts excised. At ten-year average follow-up (range, 7-12 years) there were no recurrences. The patients own view of outcome was excellent in seven, good in three, and fair in one case. The range of motion at the distal interphalanageal joint (and interphangeal joint of thumb in one case) averaged over 54° at review. Evidence of osteoarthritis was found on radiograph, or at operation in all except one case. One patient had mild longitudinal ridging of the nail, but in all others there was no nail growth disturbance. All thought cosmesis was excellent.

DISCUSSION
The early results of excision of a digital mucous cyst using a bilobed flap were encouraging, and this is maintained in the long-term. The combination of debridement and re-surfacing works. We use an extra fine rongeur for the debridement, and handle the flap with a skin hook to avoid crushing. Minimal sutures are required. The presence of osteoarthritis in most cases, and the preponderance of dominant hands support the theory of a degenerative origin in the joint.

References
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