

HELOMA MOLLE

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Heloma molle, or soft corn is a common condition that often affects the interdigital space between the fourth and fifth digits. The corn may be located at several sites, depending on the pathology encountered. Manwaring suggested that the soft corn was from "pressure by an enlarged joint." The concept of pressure from adjoining digital surfaces has been described in various literature references and treatment is focused on relieving the pressure, versus isolated removal of the lesion itself. Historically, recurrence of the lesion is predictable if the etiology of the deformity is not identified and corrected.

The soft corn lesion itself may be located at various sites depending on the pathology. The condition may occur at both sides of the distal or proximal interphalangeal joints of the opposing toe surfaces. More commonly, the lesion site occurs at the proximal interphalangeal joint of the fifth digit when the head of the proximal phalanx of the

fifth digit is compressed against the base of the proximal phalanx (lateral condyle) of the fourth digit. The condition may also occur at the distal interphalangeal joint of the fifth digit when it is compressed against the head of the proximal phalanx of the fourth digit.

A lesion may form in the fourth web interspace, and this is most often associated with a short fifth metatarsal which causes the phalanges of the fifth digit to exist further proximal (Figs. 1A, 1B). First, second, and third interspace lesions have all been observed on a less frequent basis. Patients will often relate pain at the site of the lesion aggravated by pressure, tight footwear and ambulation. There may be a past history of home care including "corn-plasters" or razor shaving without satisfactory results.

Associated conditions may include hallux valgus, underlying fifth toe deformity, or adductus deformity of the fifth metatarsophalangeal joint. Hammerdigits or clawtoes of the involved interdigital space do not necessary exist. Often the heloma molle may be ignored, producing several more serious sequelae including infection, sinus tract to the bone, intertrigo, or osteomyelitis.

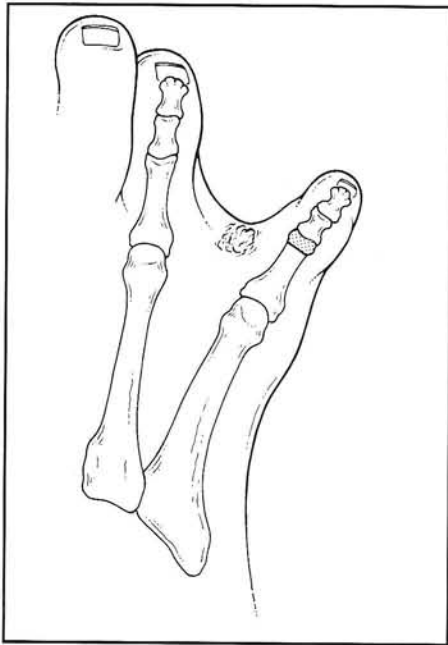


Figure 1A. Typical location of heloma molle in the fourth web space.

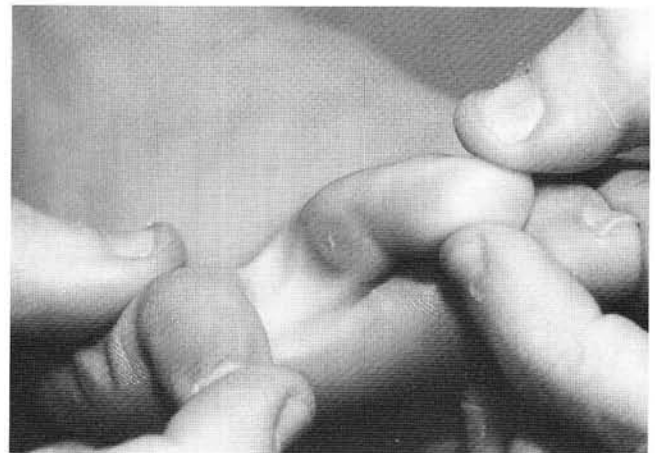


Figure 1B. Heloma molle located on the lateral side of the fourth digit.

TREATMENT

Conservative care consists of digital separation, padding, local debridement, and topical drying agents and antimicrobials when intertrigo is involved. Maintenance care is usually necessary, and less than satisfactory results are often obtained.

Surgical treatment of the fourth interdigital space heloma molle includes several surgical options, with the focus being on resection of the pressure areas. Manwaring suggested resection of the prominent lateral base of the proximal phalanx of the fourth digit. He did not recommend removal of the corn itself, because he believed the lesion would resolve when relieved from pressure. Most authors agree with the lack of need for lesion resection.

Kelikian, however, recommended the removal of the corn, as well as excision of the fourth digital proximal phalanx base, or fifth digit base resection when a dorso-lateral fifth toe lesion was also present. In addition, several authors have suggested syndactylization of the fourth and fifth toes regardless of which base was resected. Other literature references suggest only a fifth digit proximal interphalangeal joint arthroplasty in combination with removal of the lateral aspect of

the base of the proximal phalanx of the fourth digit (Fig. 2A). Syndactylization is advised if recurrence occurs.

The author's technique begins with wire isolation radiographs for joint prominence and location, and resection of the involved area, more commonly, the head of the proximal phalanx fifth digit. Following resection, syndactylization of the fourth and fifth toes is performed (Fig. 2B).

Preoperative assessment involves resolving any infectious process or maceration prior to surgical intervention. Topical drying and antimicrobial solutions or gels may be applied to assist this process. Aluminum chloride hexahydrate is an excellent interdigital solution to resolve maceration when used in conjunction with an antifungal tincture or antibiotic solution. Erythromycin or clindamycin solutions designed for dermatologic use are excellent adjuncts to aluminum chloride hexahydrate, when local bacterial contamination is suspected. Creams and ointments should be avoided because they only perpetrate maceration.

A conventional syndactyly approach is utilized, with the creation of a mirror image on the contralateral digit. The skin is then resected, maintaining the integrity of subcutaneous and neurovascular structures. Access to the PIPJ fifth

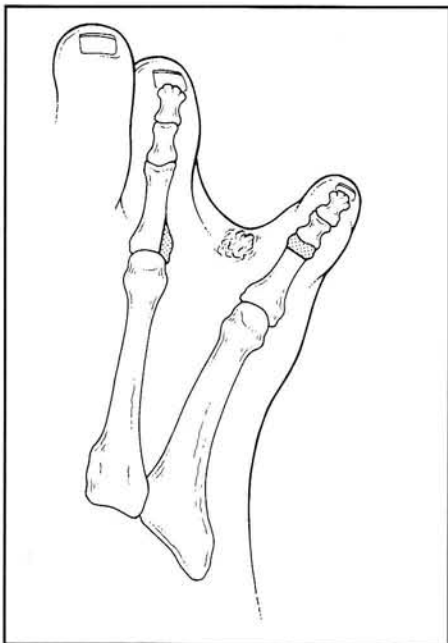


Figure 2A. Lateral base resection of the fourth proximal phalanx and fifth proximal phalangeal head resection.

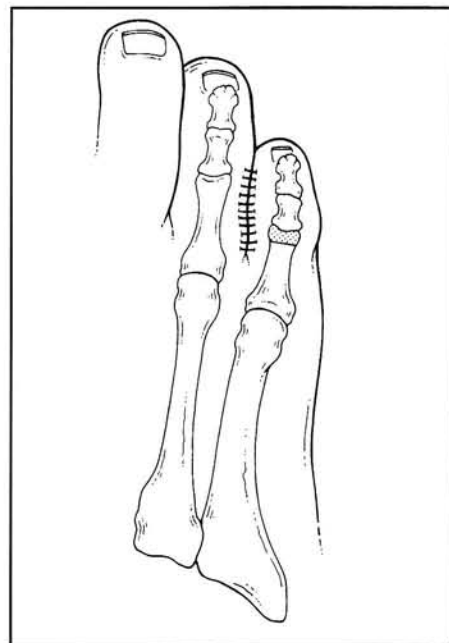


Figure 2B. Syndactylization with fifth proximal phalanx head resection.

digit is then obtained through the incision, and arthroplasty of the fifth PIPJ is performed. Closure is achieved, beginning plantarly with a horizontal mattress technique to maximize eversion. The surgical goals are to maintain digital length, avoid varus or valgus rotation, and achieve digital cleavage for a natural appearance (Figs. 3A, 3B). Care should be taken to avoid excessive dorsal or plantar positioning of the fifth toe when performing this procedure.

Postoperative care involves a no load-forefoot shoe for two weeks. Sutures are removed at the end of that time period. Mild to moderate edema may be expected depending on the amount of surgical trauma. The dressing should be changed every three to four days during the first two-week period to minimize maceration which will compromise skin healing.

In summary, heloma molle can be a painful, chronic lesion with potentially serious adverse sequelae. If conservative care is unsuccessful, surgical repair should be considered.

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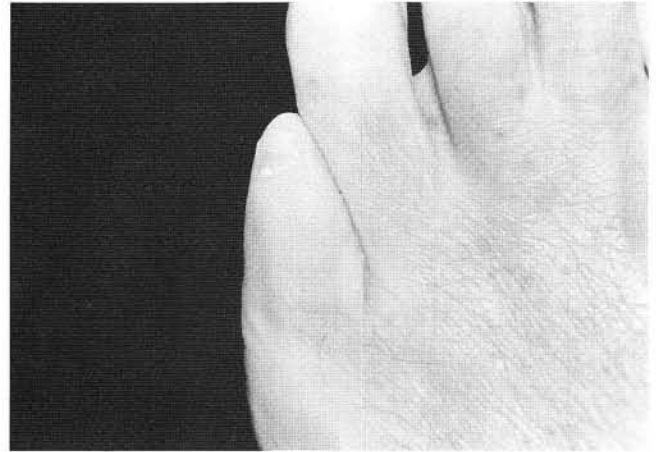


Figure 3A. Dorsal view of syndactylization of the fourth and fifth digits. The surgical goal is to maintain digital length, avoid rotation, and achieve digital cleavage for a natural appearance. Note the accurate positioning of the fourth and fifth toes in the same plane.

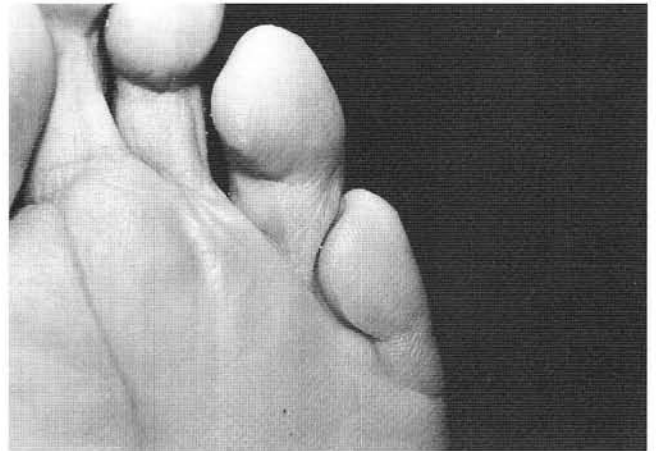


Figure 3B. Plantar view of syndactylization.