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PAINFUL INTERDIGITAL CLAVUS (SOFT CORN): Treatment by Skin-Plastic Operation

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RESULTS

Three consecutive cases were treated by the technique described, and the results were excellent in all. There was no pain, and the strength of the grip approached normal. The final roentgenograms showed that the smaller fragment was in a more normal position and that the mortise had been restored. Two of the three patients were seen periodically in the Out-Patient Clinic for several months and the results remained good, the patients being free of symptoms and able to perform their full duties. The third patient was seen for some weeks after operation, and the result was good when he was last seen. The roentgenograms of a typical case, before and after operative repair, are shown in Figures 4-A and 4-B.

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PAINFUL INTERDIGITAL CLAVUS (SOFT CORN)

TREATMENT BY SKIN-PLASTIC OPERATION

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Painful interdigital clavus and its etiology are well known. The conventional operation for the relief of this condition usually consists of a partial resection of the fourth metatarsophalangeal joint. This procedure appears to be a rather radical method of treatment for such a minor lesion.

Basically, the principle of the conventional operation is the removal of the normal underlying bone impinging upon the skin. The same effect can be attained more logically, however, by removing the overlying pathological skin of the affected toe and, by a simple

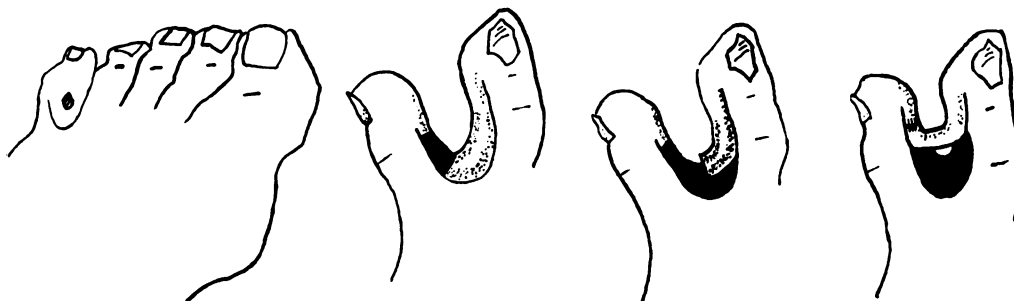


FIG. 1

FIG. 2

FIG. 3

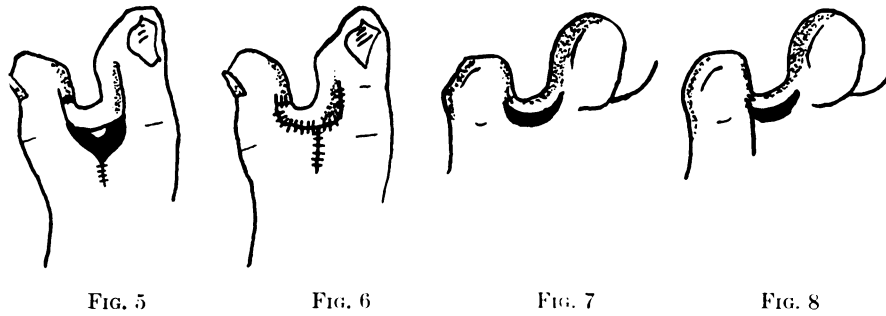
FIG. 4

Fig. 1: Relation of soft corn to foot.

Fig. 2: Fourth and fifth toes spread apart, showing interdigital area. The soft corn has been excised: bare area is in black. Lines of incision shown for dorsum only.

Fig. 3: Medial skin flap being mobilized.

Fig. 4: Flap has been advanced and sutured. Defect left in black.



Figs. 5 and 6: Suture of skin edges to each other and to flap. Note that web has been advanced.

Fig. 7: Plantar aspect; shows remaining defect.

Fig. 8: Method of raising flap.

Fig. 9: Flap has been raised.

Fig. 10: Flap has been mobilized and sutured.



skin flap, advancing the web distal to the underlying impinging normal bone. This operation has been performed on twenty toes, although the total number of patients was seventeen, as three cases were bilateral. All results were gratifying. In one case, necrosis developed in the flap; but the area became epithelialized and the web remained advanced.

The operation consists of (a) excising the painful interdigital clavus; (b) turning up a skin flap from the lateral aspect of the fourth toe; and (c) forming a sliding skin flap on the plantar aspect of the foot at the base of the fourth toe.

OPERATIVE PROCEDURE

Following excision of the soft corn on the fifth toe, a skin flap is turned up on the lateral aspect of the fourth toe, based distally, and is sutured to the distal edge of the skin from which the clavus has been removed (Figs. 1, 2, 3, and 4). Three interrupted silk sutures are sufficient for this step of the operation. The free dorsal edges of the wound on the fourth and fifth toes are then sutured together and to the free dorsal edge of the skin flap, forming a Y closure (Figs. 5 and 6). On the sole of the foot, from the base of the fifth toe in the lateral re-entrant angle of the still open plantar wound, an incision, three-quarters of an inch long, extending proximally, is made. The skin flap is then undermined and mobilized, thus simply effecting a closure of the plantar defect (Figs. 7, 8, 9, and 10).

The sutures are usually removed at the end of ten days. Frequent dressings are advised, beginning as early as the second day after operation. This keeps the wound dry and prevents maceration of the tissues, so common to the interdigital areas. With the operation described, convalescence is shortened. After removal of the sutures, the patient is able to walk without pain. After this operation, there is no possible danger of recurrence. In the experience of the authors, it offers distinct advantages over the conventional operation.