

A PILOT PROJECT ON THE TREATMENT OF PREOPERATIVE OEDEMA OF CLOSED UNSTABLE ANKLE FRACTURES USING IPC (INTERMITTENT PNEUMATIC COMPRESSION) IN PATIENTS WHO ALREADY DEVELOPED BULAE AND WOUNDS

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Aim: To demonstrate how the use of IPC can reduce the time of preoperative swelling in patients with ankle fractures who have developed bulae & wounds from new oedema.

Method: After 5 days of using the standard practice of elevating the lower leg above heart level, the patient, still having oedema, developed bulae in the skin over the fracture. The Bulae were cut off and treated with an occlusive wound dressing. During the pilot project the oedema was treated preoperatively with IPC and compression. Wounds and oedema were examined daily by an orthopaedist surgeon for operation readiness. The circumference of the leg was measured and photographed for documentation on a daily basis.

Result: It was found that ankle swelling was reduced faster than in other similar patients. Besides, the patient had an uncomplicated postoperative course. As an additional benefit, the patient experienced considerable pain relief, both before and after surgery, due to the faster reduction of swelling achieved with the oedema-reducing IPC treatment.

Conclusion: From this small-scale pilot project we believe to be able to conclude that IPC has a beneficial effect on preoperative oedema treatment in patients with ankle fractures.

Next step: As a consequence of this pilot project, we have launched a larger project to examine whether IPC (intermittent pneumatic compression) can reduce the time of preoperative swelling of ankle fractures and prevent the occurrence of bulae due to this swelling, avoiding further postponement of surgery. In addition, we want to examine whether actual pain relief can be observed in consequence of this very efficient reduction of oedema.