

ESF Care

There can be swelling for the first few days after placement of an external skeletal fixator (ESF). Patients may be kept in the hospital for this time, and the limb and the ESF frame will be covered in a dressing. Sterile sponges/swabs are placed under the connecting bars to help limit swelling, and an absorbent sterile contact layer (Allevyn, Smith & Nephew) is placed around each pin to absorb discharge. The whole frame and lower limb (including the foot) are enclosed in a Soffban/conforming bandage/Vetrap dressing. The first dressing change is usually performed 24-48 hours postoperatively. Aseptic precautions are taken to avoid contaminating the pin tracts (i.e. gloves are worn, and care is taken that the contact layer [Allevyn] is kept sterile).

Once any swelling has resolved (typically 2-6 days) the foot will not need to be included in the dressing. Allevyn may still be required around each pin, until a dry scab forms around each pin tract, and sponges or swabs may still be used under the connecting bar(s) to avoid swelling. Dressing changes performed from this time, up until a dry scab forms around each pin, should be performed with care not to contaminate the pin tracts, and with an Allevyn or similar contact layer around each pin.

Within 7-10 days of surgery, a dry scab should form around each pin tract. The scab seals off the pin tract and at this stage, with the absence of any discharge, the Allevyn is no longer required. It is still advisable to keep the frame covered in a layer of Soffban/Vetrap. There may be sutures at some of the pin tracts which can be removed at this stage. Occasionally there will be a persistent serous discharge, for example if there is movement of the soft tissues around a pin. This may not require any specific treatment. If a pin tract infection develops, the discharge is generally more copious and pusy, and the patient's limb use is likely to have deteriorated. If this is suspected, a swab should be taken for culture and sensitivity testing and the pin tract lavaged with dilute (0.05%) chlorhexidine. Cephelexin or co-amoxiclav should be started pending culture results.

ESF patients should be checked every 7-10 days during the convalescence. The bandage should be unwrapped (if hiding the pin tracts) and the pin tracts checked for discharge/redness/swelling. If only the connecting bars are bandaged, and the pin tracts are open, a 'Buster' collar should be used to avoid the patient traumatising the frame or licking the pin tracts. Fracture patients treated with ESF should weight-bear on the affected limb within a few days of surgery, and show gradual improvements in limb use over time. If a patient continues not to use the limb, or stops using the limb, please let us know. Please also let us know if there is persistent discharge around the pins or any other concerns. We will typically see patients back at Anderson Moores 4-6 weeks after surgery for follow-up radiographs, but will see patients back sooner if there are any concerns.

