

iii STORY

A 54 year old teacher presented with a history of non-insulin dependant diabetes and hypertension. The patient was also severely obese. Over a period of one year, the patient developed an ulcer on the plantar aspect of the right foot in the medial longitudinal arch area. The lesion presented with a diameter of approximately 5cm and a depth of 2cm.



Figure 1. It was decided that Iruxol be used. The procedure was a once daily application. The wound was first cleaned with normal saline solution. Cicatrin powder and Iruxol were applied. Wound was closed by Opsite Flexigrid.



Figure 2. At three weeks the surrounding hyperkeratosis was reduced and wound size was smaller.

Another excellent choice of treatment is using collagenase clostridiopeptidase (*Iruxol*) mono ointment. *Inixol* digests strands of necrotic collagen and debrides the wound allowing normal granulation to take place. It must be pointed out that the *Inixol* must be left on for 24 hours to

be effective. (see case report). *Iruxol* should be terminated once re-epithelialisation is well established.

Deeper infections must be treated with antibiotics. If the infection appears to be absolutely limited to the peri-wound area and is only minimally invasive, then oral antibiotics and close outpatient management is warranted. Most infected chronic wounds are polymicrobial in nature in the diabetic scenario, and broad spectrum coverage is required. These wounds will often have gram positive and gram negative aerobes, as well as anaerobic bacteria. It is important to note that even though culture results show only one organism, the presence of occult organisms is frequent in the diabetic. Amoxicillin covers the majority of non penicillin-allergic patients. Dosage is 500 mg; 8 hourly. In patients that are allergic to penicillin, a combination of clindamycin, and ciprofloxacin, may be used. These drugs cover gram positive, gram negative, and anaerobic organisms. The patients should be instructed to monitor their wounds closely. If osteomyelitis is present, a 6 week course of intravenous antibiotics should be given, either at home or in hospital.

Limb threatening infection

Patients that are febrile, with cellulitis or signs of invasive illness may need to be admitted for intravenous antibiotics and surgical debridement.

SURGICAL DEBRIDEMENT

Debridement of non-healing wounds is of paramount importance. The purpose is to remove heavily contaminated tissue that can potentially allow organisms to invade deeper tissue. The process of debridement removes necrotic, devitalized tissue. Any devitalized tissue remaining in a wound promotes further infection and further delays healing.

Deep debridement of necrotic tissue to a strong bleeding surface of bone and muscle with contractile evidence is essential. Wounds in contact with frank purulence should be left open. As the wound heals it gains resistance to infection and a choice can be made at that time whether to close the wound, with or without a graft, or to leave the wound open.

Wounds left open have an increase in vascular permeability. Interstitial fluids leak into the wound. Fibrinogen, one of the protein fluids present in the wound, is not reabsorbed by the lymphatics and forms into fibrin. The fibrin acts as a coagulum over the wound and incorporates the bacteria. This seals it, preventing contact with antibiotics. When the fibrinous coagulum is removed with interval debridement the antibiotic therapy becomes more effective. The