SUMMARY

There are three types of chronic ulceration commonly encountered in the lower extremities - stasis, Ischemic and neurotrophic ulcers and they are readily distinguished one from the other.

The stasis ulcer is located within the "gaiter" area, most commonly near the medial malleolus. It is usually larger than the other types of the ulcers and irregular in outline, but also shallow and with a moist granulating base. It is always surrounded by a zone of stasis dermatitis. The pain in stasis ulcer is mild, and relieved by elevation. The object of dermatological treatment of venous ulcer is to get quickly the skin healthy enough to allow operation of the communicating veins. If the venous leg ulcer presents with no eczema, treatment is with non irritant compresses, a sorbo rubber pad over the ulcer area, and an elastic bandage. Zinc paste should be applied to the skin surrounding the ulcer. If the ulcer presents with eczema, treatment will focus on the eczema first then the ulcer.
Ischemic ulcers are usually quite painful, and there is likely to be typical ischemic rest pain in the distal fore foot that occurs nocturnally and is relieved by dependancy. These ulcers may have irregular edges at first, but when chronic they are more likely to be "punched out". They are commonly located distally over the dorsum of the foot or toes, but may occasionally be pretibial. The ulcer base usually consists of poorly developed, grayish granulation tissue. The surrounding skin may be pale or mottled and signs of chronic ischemia are invariably present. Probing or debriding the ulcer causes little bleeding. The local treatment of arterial ulcer is as venous ulcer, but not use bandage. Vascular surgery may be indicated in purely local arterial occlusion. Amputation is unavoidable in severe gangrene and intolerable pain.

Neurotrophic ulcers, on the other hand are completely painless but bleed with manipulation. They are deep and indolent, are often surrounded by chronic inflammatory reaction and callus. Their location is typically over pressure points or calluses e.g. the plantar surface of the first and fifth metatarsophalangeal joints,
the base of the distal phalangx of the great toe, the
dorsum of the interphalangeal joints of toe with flexion
contractures, or the calloused posterior rim of the heal
pad. The patient usually has long-standing diabetes
with a neuropathy characterized by patchy hypesthesia
and diminished positional sense, two-point discriminat-
ion and vibratory perception. The treatment of neurot-
rophic ulcers is often unsatisfactory, but in young pat-
ients considerable benefits can be obtained. When dia-
betes is present it must be adequately controlled.

Ulceration of the leg is not associated with unc-
omplicated lymphoedema. In rare patients lymphangio
sarcoma may develop in a lymphedematous limb and this
tumor may ulcerate. The distribution of lymphedema is
diffuse but always greater distally, beginning with the
toes and moving upward. This swelling is neither pitting
nor brawny but firmly spong in character, that is, al-
though it does not significantly resist deformation by
pressure, the skin and subcutaneous tissues immediately
return to their original position as the pressure is
withdrawn.
More than 95% of all chronic leg ulcers fit into one of the above mentioned three recognizable types. The remainder are hard to distinguish, except that they are not typical of the other three types. Vasculitis, hypertension, and syphilis all may produce leg ulcers. The first often produces multiple punched out holes and an inflamed indurated base that, on biopsy suggests fat necrosis or chronic panniculitis. Hypertensive ulcers represent focal infarcts and are very painful. They may be located around the malleoli, particularly laterally. Syphilitic ulcers are uncommon today, but in any a typical ulcer this or other systemic causes of ulceration, such as chronic ulcerative colitis with pyoderma gangrenosum or tuberculosis, should be suspected. Long-standing ulcers that are refractory to treatment may represent underlying osteomyelitis or a secondary malignant lesion.

Most patients with ulcers of one of the specific types—just described—blame trauma as the initiating agent. Occasionally, trauma may actually be the primary etiologic factor, with the chronicity of the ulcer being related either to the slow healing that is characteristic of the lower third of the leg or possibly to
a degree of arterial insufficiency that would otherwise be subclinical. Such ulcers often heal with non specific therapy such as intermittent elevation and the application of an unna's boot.

Good vascular consultation is exemplified by the problem-oriented approach to the painful, swollen, or ulcerated leg; by careful interrogation, and by thoughtful examination, all guided by an experienced index of suspicion. Having completed the initial assessment at the bedside, the examiner must next consider the need to proceed further diagnostically, either for the sake of diagnosis itself or to provide further objective information on which to base therapeutic decisions. Whether the basic diagnosis is obvious or not, the location and the extent of the vascular disease and the degree of circulatory impairment can often be objectively documented by noninvasive diagnostic methods. Angiographic confirmation is usually obtained only if necessary in order to make major therapeutic decisions, including the feasibility of reconstructive vascular surgery. Since these procedures are not without significant risk or expense, the choice between operative and non operative treatment should usually be made before proceeding with angiographic studies.