**Pathway:** Venous Leg Ulcers

- Venous Leg Ulcers affect 1.7% of those ≥ 65 years
- Compression bandaging is the recommended treatment to heal uncomplicated venous leg ulcers
- All venous leg ulcers contain bacteria; most are colonisers, but some cause clinical infection
- Microbiology investigations should only be undertaken when there are clinical signs of infection

**Taking a sample**

**What can a microbiological sample from a venous leg ulcer tell me?**

The organisms present and their antimicrobial susceptibilities only. Microbiology swab samples cannot be used to determine the presence of infection in a leg ulcer, as this is a clinical diagnosis.

**When should I sample a venous leg ulcer?**

When clinical criteria indicate that infection is present:

- Increased pain
- Enlarging ulcer
- Cellulitis
- Pyrexia

A microbiology sample should only be taken when antimicrobials are indicated. The sample should be taken before antibiotics are started. Routine bacteriology sampling should not be undertaken.

**How should I sample a venous leg ulcer for microbiology investigation?**

**Wound swabs** offer ease of use, low cost and recent studies indicate they give similar results to **tissue biopsies** that were previously considered the gold standard.

1. **Use a swab** with transport medium and charcoal, to aid survival of fastidious organisms
2. Cleanse the wound with tap water or saline to **remove surface contaminants**
3. **Slough and necrotic tissue should also be removed**
4. Swab **viable tissue** displaying signs of infection whilst **rotating the swab**

With all specimens include all clinical details (about patient, ulcer and current or recent treatment) to enable accurate processing and reporting of the specimen.

Transport specimens to the laboratory as soon as possible to aid survival of fastidious organisms

**References & Additional information:**

- Venous Leg Ulcers – Infection Diagnosis & Microbiology Investigation – Quick Reference Guide for Primary Care – for full guidance [click here](#)
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<td>Dr Phil Garnett</td>
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