# Guidance for identifying Cellulitis or Red Legs

Inflammatory or cellulitis skin colour changes may differ in presentation depending on skin tones. It is vital that clinicians are familiar with skin tone and texture changes to ensure accurate diagnosis and care (Wounds UK, 2021).

## Unilateral Leg Discolouration

### Well Patient

**Red Flag:**
Assess for suspected acute deep vein thrombosis. If suspected:

- For Secondary Care follow the Venous Thromboembolism (VTE) – Prevention and Treatment of VTE in Patients admitted to hospital
- For Primary care refer urgently to the Ambulatory Care Unit.

**Amber Flag:**
If no DVT is suspected consider:

- Venous Hypertension –
- Varicosities
- Acute Lipodermatosclerosis
- Phlebitis
- Staining
- Charcot foot.

**Treat as Lower Limb Inflammation**

**Intact, Dry skin**

**Treatment**
1. Mark area with a marker pen and elevate leg
2. Commence antibiotics and analgesia as per local guidance
3. Initiate skin care (wash legs daily with soap substitute, dry thoroughly)
4. Encourage Exercise (Patient Resources (thebls.com))

**Referral and re review**
Review antibiotics after 48 hours:

- If patient has compression recommence after 48 hours.
- If no improvement in 48 hours refer back to the local cellulitis guidance.
- For patients with Lymphoedema and re-occurring cellulitis consider long term antibiotics.
- If patient has had two or more episode of lower limb cellulitis in 6 months refer to the vascular service.

**If the named product on this pathway is not available a temporary second line product is available in the Doncaster Wide Wound Care Formulary Document.**

### Unwell /feverish Patient

(Unilateral leg discolouration, pyrexia, heat, pain, oedema, possible skin blistering).

Consider a diagnosis of acute **cellulitis** and treat according to local policy. For patients with lymphoedema and unilateral cellulitis see the following guidance: British Lymphology Society - BLS (thebls.com)

**Red Flag:**
Differential diagnosis may include necrotising fasciitis. If expected refer urgently to:

- Secondary Care – ESAC for Vascular Services
- Primary Care – Emergency Department.

**Lower Limb Cellulitis**

**Cellulitis** increased swelling with mild redness. It is an acute bacterial infection which can affect any part of the body but can commonly affect the leg (unilateral). There is often a rapid onset within hours. (BLS 2020).

**Broken, Wet skin**

**Treatment**
As per the Cellulitis Intact, Dry skin treatment section, plus:
1. Cleanse wounds as per the Wound Bed Preparation Pathway
2. Swab open skin
3. Apply bland moisturise to intact skin
4. Apply an antimicrobial dressing as per the Infection Pathway, Kliniderm super absorbent pad and safe soft bandaging (if unable to tolerate due to pain apply a tubular bandage e.g clinifast.

**Referral and re review**
As per the Cellulitis Intact, Dry skin referral and re review section, plus:

- Refer to your local wound care service Secondary care - Skin Integrity Primary Care – Tier 2 service or District Nurse Service
- Change dressing 2 x weekly as a minimum to monitor the infection.
- After 14 days consider stopping the antimicrobial dressing if the infection has resolved.
- If the skin is still broken/wet after 14 days refer to the Pathway for Leg Ulceration.

## Bilateral Leg Discolouration

Bilateral Cellulitis is rare. Consider differential diagnosis of discolouration relating for **Inflammation** and treat accordingly.

Most common causes of lower limb inflammation:

- Lipodermatosclerosis
- Varicose eczema
- Gravitational dermatitis
- Contact dermatitis
- Fungal infection/Intertrigo in skin folds
- Drug induced
- Heat induced discolouration e.g. sunburn and radiators/ open fires/hot water bottles
- Underlying medical condition – consider diagnosis heart failure.

**Lower Limb Inflammation (Red Legs)**

**Lower Limb Inflammation (Red Legs)** can be acute but is more likely to be chronic, often present for weeks and months. Chronic discolouration can also be seen following cellulitis. Always treat the underlying conditions e.g. athletes' foot. (BLS 2020).

**Intact, Dry skin**

**Treatment**
1. Initiate skin care (wash legs daily with soap substitute, dry thoroughly)
2. Commence trial for topical steroid
3. Apply bland moisturise/ emollient
4. If patient has compression garments, continue to use these.
5. If not apply a Altipress Liner (10mmHg)
6. Encourage Exercise (Patient Resources (thebls.com)).

**Referral and re review**

- If a new symptom or diagnosis refer to Dermatology via the GP or email: dbth.dermatologyteam@nhs.net

**Broken, Wet skin**

**See the Pathway for Lower Limb Oedema, Lymphoedema and Lymphorrhoea.**

**Failure to improve/ respond to the above**

- If suspected peripheral arterial disease, symptomatic varicose veins or non-healing leg ulcer refer to vascular services.
- If concerns re skin malignancy or other skin condition, consider referral to dermatology.


**Reference:**

British Lymphology Society (2016) Consensus document on the management of cellulitis in Lymphoedema.

British Lymphology Society (2023) Lower Limb Inflammatory Pathway. CREST (2005) Guidance of the management of cellulitis in adults.

Salmon M (2016) Red legs is a chronic inflammatory condition often mistaken for cellulitis. BLS (2020) Red Legs Pathway.