Skin diversity erythema description guidance

This document is designed to provide guidance on describing erythema, also known as redness, across a broad spectrum of skin tones.

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Other documents on describing skin conditions across a range of skin tones, can be found here.

Spotting erythema in all skin types

Erythema (from the Greek erythros, meaning red) is a change in colour of an area of skin, caused by increased blood flow in certain capillaries. It is a symptom common to many diseases, particularly inflammatory skin diseases.

While redness can be an obvious symptom in people with less deeply pigmented skin, where it contrasts clearly against lighter skin tones, this is not necessarily the case in those with more richly pigmented skin, for example, black, brown and olive skin tones. An example of this is sunburn, it is a common misconception that people with dark skin tones do not burn in the sun. Although it is uncommon, it can happen, but may not be easily visible. If it does occur, it may not appear as ‘redness’ that people generally associate with sunburn.

The term redness itself can be misleading, as the colour change can run the spectrum of pink, red, and purple – in some cases it may be limited to a subtle darkening of the existing skin colour.

While the signs of erythema in richly pigmented skin can be easy to miss, there are ways of spotting it. Changes in skin colouration, are often the main sign – this can be easier to spot when affected areas are compared with unaffected skin.

There is no straightforward way to predict exactly what colour erythema will look like in an individual’s skin. It is dictated by a person’s skin tone, of which there are many more variations than most people realise, and the nature of the disease in question.

Other signs, which even if not clearly visible may become more obvious upon touching the area in question, include:

- Swelling, when subtle this may be appreciated with closer inspection of the skin pores, which may become more prominent and widely spaced
- Heat, localised to the area in question
- Surface discomfort or pain, localised to the area in question
- Changes to the texture and contours of your skin

In addition to this, if you suspect that inflammation is not easy to spot on your skin then it is sensible to take into consideration other potential symptoms of your condition. For example, if you have psoriasis another common symptom to be aware of would be the appearance of scaly patches of skin.

**Improving skin disease descriptors in dermatology**

Describing rashes accurately is critical for making the correct diagnosis. In dermatology, the words used to describe rashes and lesions (meaning areas of skin affected by a skin disease) originated in Western Europe in the 18th century, at a time when dermatology was being established as a distinct medical speciality. Given the historical origins of dermatology, the descriptors that are currently routinely used for rashes/lesions are biased, catering mostly to people of European ancestry, with lighter skin tones. This presents significant challenges and limitations when these descriptors are used universally, applying to people from diverse geographic ancestral backgrounds, with a wide spectrum of skin tones. This spectrum of skin tones is far broader than currently recognised by commonly used classification systems.

For example, certain rashes/lesions are described as being ‘erythematous’ in colour. This refers to a symptom called ‘erythema’ (from the Greek for ‘red’), which is a change in colour of an area of skin, caused by increased blood flow in certain capillaries. Symptoms may even be described as ‘salmon-coloured’, for example, in psoriasis. Such descriptors are of limited usefulness when applied to individuals with darker skin tones, in whom redness may not be so easily appreciated or for whom colour may take on a different appearance.

It is therefore vital that the language used for describing rashes/lesions in dermatology is updated, to be inclusive and reflective of the UK’s ethnic diversity.

The British Association of Dermatologists (BAD) has assembled an international group of dermatologists, with extensive experience in treating people with darker skin tones (including Dr Ophelia E. Dadzie (UK), Prof Ncoza Dlova (South Africa) and Dr Antoine Petit (France)) to tackle this issue, with a view to updating current skin descriptors used in dermatology, with new descriptors that are applicable to all ethnicities. This document is part of this work.

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