Patient

View this article online at: patient.in/doctor/erythrodermic-psoriasis

Erythroderma (Erythrodermic psoriasis)

Synonyms: psoriatic erythroderma, erythroderma psoriatica

What is erythroderma?[1]

Erythroderma is an extreme and often refractory variant of psoriasis with high morbidity and increased mortality. Erythroderma refers to a generalised redness of the skin. It involves all, or nearly all (usually stated as at least 90%), of the skin's surface.[2]

The pathophysiology is largely unknown but it may arise as a result of many inflammatory skin conditions such as eczema, drug eruptions and malignancies.

Psoriasis is the most common cause of erythroderma in adults.[3] Erythrodermic psoriasis usually occurs in two contexts:

- In the setting of known, progressively worsening chronic plaque psoriasis.[4]
- It may be precipitated by infection, tar, drugs, or withdrawal of corticosteroids. It is then considered to be part of the spectrum of unstable psoriasis.[5]

Erythrodermic psoriasis is rare (1-2% of those with psoriasis). Very occasionally, it can be the first presentation of psoriasis.[6]

Is erythroderma dangerous?

Erythroderma is a dermatological emergency: the generalised erythema signals skin failure which can be complicated by a number of serious problems (see 'Complications', below). It can be fatal and requires urgent inpatient management.[7]

Erythroderma symptoms (presentation)[6]

Diffuse, widespread severe psoriasis, affecting more than 90% of the body surface area.

It can develop gradually from chronic plaque psoriasis or appear abruptly, even in people with mild psoriasis. It can be precipitated by various factors such as systemic infection, irritants such as coal tar or ciclosporin, phototherapy, or sudden withdrawal of corticosteroids.

Lesions may feel warm, and may be associated with systemic illness, such as fever, malaise, tachycardia, lymphadenopathy, and peripheral oedema.

Differential diagnosis

Distinguish from other causes of erythroderma:

- Eczema (contact, atopic, seborrhoeic).
- Lymphoma, particularly Sézary's syndrome.
- Drug eruption - eg, allopurinol, gold, isoniazid, phenytoin, sulfonamides, sulfonylureas.
- Pityriasis rubra pilaris.
- Ichthyosiform erythroderma.

Investigations

Diagnosis is clinical, based on the history and presentation. Where the cause of the erythroderma is known to be psoriasis, investigations look for the presence of complications and their extent.

So, in addition to the baseline observations, blood tests (eg, FBC, U&Es, LFTs, inflammatory markers, blood cultures) are taken to look for acute kidney injury, anaemia, hypoalbuminaemia and infection. Additionally, efforts will be made to identify any triggers.

Erythroderma treatment and management[3]

Important information
Arrange immediate same-day specialist dermatology for assessment and ongoing management.[6]

Conventional treatments, such as topical glucocorticoid therapy, ciclosporin, acitretin, and methotrexate have some but limited efficacy, and treatment discontinuation may result in flares. Newer biological drugs, including anti-TNF, anti-IL-17, and anti-IL-12/23 agents, have shown promise, but most of the available evidence is currently based on small case series and reports. Few studies have compared available treatment options.[1]

Following emergency admission, management will require skilled nursing care and include:

- Bed rest in a warm room (30-32°C).
- Emollients and cool, wet dressings.
- Treatment of complications.
- Nutritional support.

There is a dearth of high-quality evidence on which to base treatment decisions:[8]

- Topical tar therapy and phototherapy should be avoided in the early phases of treatment.
- Retinoids have also been reported to induce this condition.[9]
- Corticosteroid treatment is tricky: subsequent withdrawal may worsen the clinical state but, sometimes, this is the only effective treatment for the acute episode.
- Ciclosporin and infliximab are the most rapid-acting agents, with acitretin and methotrexate the slower-acting first-line choices.

- Combination therapy may be more effective but this remains unproven.
- Effective treatment with golimumab, a human monoclonal antibody, has been reported but further research is required.[10]

Complications[2] [4]

- Dehydration.
- Impaired thermoregulation and hypothermia.
- Cardiac failure.
- Sepsis.
- Protein loss.
- Anaemia (loss of iron, vitamin B12 and folate).
- Death.

Prognosis[1]

Prognosis is variable and good initial prognosis is dependent on early diagnosis and management. The course may be prolonged, relapses are frequent, and there is an associated mortality.

Erythroderma prevention

There are no specific preventative measures for erythroderma other than optimising the management of any pre-existing psoriasis and avoiding precipitants identified above.

Further reading

- The Psoriasis Association

References

1. Shao S, Wang G, Maverakis E, et al; Targeted Treatment for Erythrodermic Psoriasis: Rationale and Recent Advances. Drugs. 2020 Apr;80(6):525-534. doi: 10.1007/s40265-020-01283-2.

2. Meier M, Sheth PB; Clinical spectrum and severity of psoriasis. Curr Probl Dermatol. 2009;38:1-20. Epub 2009 Jul 28.
3. Okoduwa C, Lambert WC, Schwartz RA, et al; Erythroderma: review of a potentially life-threatening dermatosis. Indian J Dermatol. 2009;54(1):1-6. doi: 10.4103/0019-5154.48976.
4. Langley RG, Krueger GG, Griffiths CE; Psoriasis: epidemiology, clinical features, and quality of life. Ann Rheum Dis. 2005 Mar;64 Suppl 2:ii18-23; discussion ii24-5.
5. Saraceno R, Talamonti M, Galluzzo M, et al; Ustekinumab treatment of erythrodermic psoriasis occurring after physical stress: a report of two cases. Case Rep Dermatol. 2013 Sep 26;5(3):254-9. doi: 10.1159/000348645. eCollection 2013.
6. Psoriasis; NICE CKS, September 2022 (UK access only)
7. Diagnosis and management of psoriasis and psoriatic arthritis in adults; Scottish Intercollegiate Guidelines Network - SIGN (October 2010)
8. Rosenbach M, Hsu S, Korman NJ, et al; Treatment of erythrodermic psoriasis: from the medical board of the National Psoriasis Foundation. J Am Acad Dermatol. 2010 Apr;62(4):655-62. Epub 2009 Aug 8.
9. Ahdout J, Mandel H, Chiu M; Erythroderma in a patient taking acitretin for plaque psoriasis. J Drugs Dermatol. 2008 Apr;7(4):391-4.
10. Lee WK, Kim GW, Cho HH, et al; Erythrodermic Psoriasis Treated with Golimumab: A Case Report. Ann Dermatol. 2015 Aug;27(4):446-9. doi: 10.5021/ad.2015.27.4.446. Epub 2015 Jul 29.

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. Egton Medical Information Systems Limited has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our conditions.

Authored by:	Peer Reviewed by: Dr Pippa Vincent, MRCGP	
Originally Published: 20/11/2023	Next review date: 21/04/2023	Document ID: doc_9320

View this article online at: patient.in/doctor/erythrodermic-psoriasis

Discuss Erythroderma (Erythrodermic psoriasis) and find more trusted resources at Patient.

To find out more visit www.patientaccess.com
or download the app

Follow us