



[Authoritative facts](#) about the skin from the [New Zealand Dermatological Society Incorporated](#).

[Home](#) | [Skin signs of systemic disease](#)

## SAPHO syndrome

### What is SAPHO syndrome?

---

SAPHO syndrome is characterised by any combination of:

- Synovitis (inflammation of the joints)
- Acne ([conglobata](#) or [fulminans](#))
- Pustulosis (thick yellow blisters containing pus) often on the palms and soles and similar to [palmoplantar pustular psoriasis](#))
- Hyperostosis (increase in bone substance)
- Osteitis (inflammation of the bones)

The cause is unknown.

Other skin lesions seen in SAPHO syndrome include: [hidradenitis suppurativa](#) and [dissecting cellulitis of the scalp](#).

The skin lesions in SAPHO syndrome are characterised on [skin biopsy](#) by collections of inflammatory cells, known as neutrophilic pseudoabscesses.

Bony involvement mostly affects the breast bone (sternum), resulting in decreased mobility due to pain, tenderness and swelling. The collar bones (clavicles) are also frequently enlarged on X-ray. Bone biopsy also reveals abscesses, known as sterile osteomyelitis.

SAPHO syndrome is classified along three different spectrums.

- Pustulo-psoriatic hyperostotic spondylarthritis (PPHS)
- Chronic recurrent multifocal osteomyelitis of the adult age (CRMO)
- Imperfect forms of these.

Prevalence of CRMO is estimated at 0.04% whilst the other entities are rarer.

### How is the diagnosis made?

---

SAPHO syndrome is suspected when a patient presents with a pustular skin disease in association with rheumatic pain.

Magnetic resonance imaging (MRI scan) shows inflammation of the bone marrow or joints at characteristic sites such as the collar bone, breast bone, pelvis, heel, and lower jaw.

SAPHO

---



Acne fulminans

## Treatment

---

SAPHO has no specific drug treatment. It can be a chronic condition but eventually self-heals.

A rheumatologist may manage the joint symptoms, often prescribing nonsteroidal anti-inflammatory drugs or sulfonamides such as sulfasalazine.

A dermatologist may use vitamin A derivatives to treat the acne ([isotretinoin](#)) and the palmoplantar pustulosis ([acitretin](#)).

Other drugs that may be used include:

- [Colchicine](#)
- [Topical corticosteroids](#)
- [Systemic corticosteroids](#)
- [Methotrexate](#)
- Calcitonin
- Bisphosphonates
- [Infliximab](#)
- [Etanercept](#).

### Related information

---

#### References:

- [Schilling F. SAPHO syndrome, Orphanet encyclopaedia, October 2004.](#)

#### On DermNet NZ:

- [Acne fulminans](#)
- [Palmoplantar pustulosis](#)
- [Hidradenitis suppurativa](#)

#### Other websites:

#### Books about skin diseases:

See the [DermNet NZ bookstore](#)

**Author:** Dr Sarah Hill, dermatology registrar, Health Waikato

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

Created 2006. Last updated 26 Dec 2006. © 2008 NZDS. Disclaimer.

