



## Demodicidosis of the nipple

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A 40-year-old woman was referred to our clinic because of a 7-month history of pruritus in her nipples. 1 year earlier she had undergone complete excision of a squamous cell carcinoma of the tongue.

Physical examination was unremarkable, without signs of rash or retraction visible over the nipple area. Nipple dermoscopy and a subsequent biopsy showed the presence of numerous demodex mites (figure).

Two demodex species reside within the human pilosebaceous unit: *Demodex folliculorum* and *Demodex brevis*. *D folliculorum* is found in hair follicles, whereas *D brevis* is found predominantly in the sebaceous and meibomian glands.

Although quite commonly found in the nipple areola complex, demodex mites are usually asymptomatic. Garven, in *The Lancet* in 1946, was the first to suggest their relevance to the pathogenesis of sore nipples. Other causes of nipple pruritus include eczema secondary to contact or atopic dermatitis, chronic mucocutaneous candidiasis, Darier's disease, amyloidosis, benign tumours (such as

leiomyomas), malignant tumours (eg, Paget's disease resulting from breast cancer), and demodicidosis.

These diagnoses are usually accompanied by a rash suggestive of their cause, whereas our patient did not show any cutaneous signs. Using dermoscopic examination followed by skin biopsy, we were able to identify demodex mites without evidence for any other pathology. The patient was treated with 1% topical ivermectin twice a day for 1 month, with resolution of her symptoms and complete eradication of demodex mites as ascertained by dermoscopy. Nipple pruritus should alert clinicians to the diagnosis of demodicidosis, a highly treatable and commonly overlooked disease.

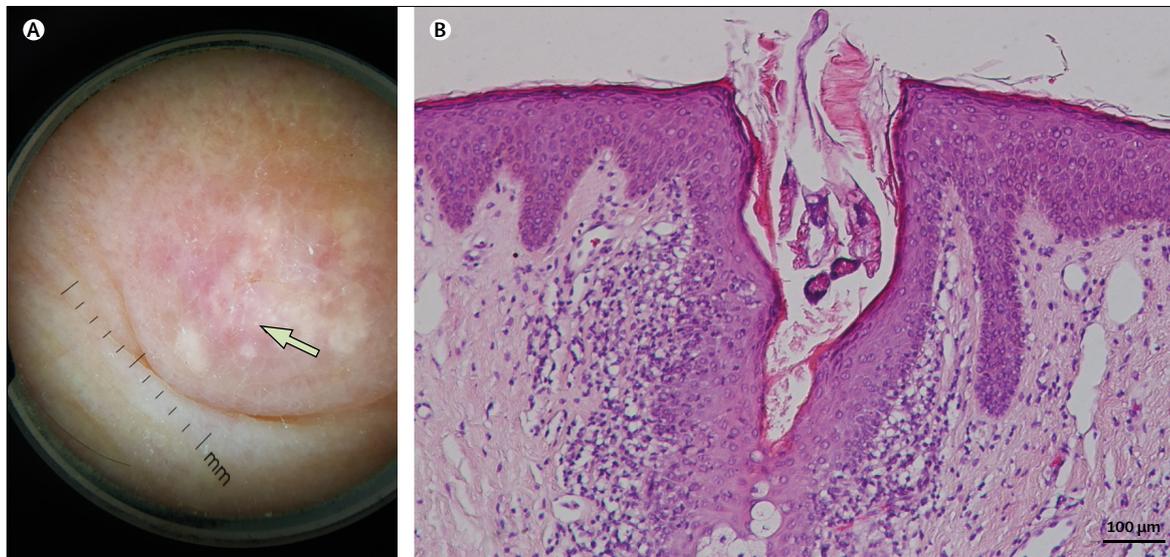
### Contributors

TZ did the literature search and study design, and obtained the patient's picture. Both authors were responsible for writing and editing the manuscript.

### Declaration of interests

We declare no competing interests.

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**Figure: Demodicidosis of the nipple**

(A) Nipple dermoscopy showing creamy, whitish dots and threads (arrow) protruding out of follicular openings, representing demodex tails. (B) A skin biopsy showed demodex mites within a dilated follicular infundibulum (haematoxylin and eosin stain, magnification  $\times 40$ ).