

Skin Infections in the South Pacific

There are many difficulties when it comes to prevention, diagnosis, and treatment of skin infections in Vanuatu. Focus also on diagnosis and treatment of secondary infections. For instance, Scabies is a microscopic burrowing mite. It is contagious skin-to-skin and skin-to-infested object. We may treat a patient for scabies, but the patient will return to home and community which may remain infected increasing the likelihood of reinfection/re-infestation. This disorder is very itchy and secondary bacterial infections may occur related to scratching which may cause breaks in the skin. These can be prevented with diligent education, nail trimming, hand washing, proper diet, and good hygiene. These secondary infections can also be treated with antibiotics to prevent systemic infection. (Hay et al., 2014 and Kline, McCarthy, Pearson, Loukas, & Hotez, 2013 and Taleo et al., 2017)

Lack of health understanding, on these remote islands, requires very basic education on hygiene and its impact on skin health. The added complication of high rates of diabetes leads to many skin problems. Diabetes can interfere with

wound healing and contributes to fungal infections as well. Poverty and access to clean water are also related problems. Some islands have no fresh water source and so are limited to rain water collected. This can make wound care complicated. There are community health centers that have antibiotics, but these facilities are not always fully stocked with needed medicines. Patients have also been known to save antibiotics for their chickens if they appear sick. So teaching patients and their families of proper hygiene, recognizing infections, and use of antibiotics is very important.

Ectoparasitic infections (Scabies)- Microscopic burrowing mite.



Contagious—
skin to skin and
skin to infested
objects.

Intensely itchy

especially at night. High rates of secondary

infections. *Recommended treatment:*

Permethrin 5% wash, ivermectin, launder/clean

environment. *Vanuatu treatment:* Benzyl

Benzoate, launder/clean environment. (High

rates of secondary infection, Mass drug

administration (MDA) ivermectin.)

Skin Infections in the South Pacific

Bacterial topical ulcer– Small raised bump, usually at site of trauma.



Blister enlarges to up to 10 cm/4 inches. Necrosis, malodorous, pus filled, bloody, black coating develops. Often with symptoms of pain fever, malaise. 3 weeks edges flatten, and swelling and pain decreases. *Recommended treatment:* Penicillin and/or metronidazole (Antifungal). *Vanuatu treatment:* Magnesium sulfate paste.

Ringworm: *Recommended treatment:* Soap, water, Butenafine cream (oral anti-fungal).



Vanuatu treatment: Soap, water, Benzoic acid.

Cutaneous leishmaniasis sores (sand fly)-

Recommended treatment: Antimonial drugs



(never for women of childbearing age).

Vanuatu treatment:

Anti-parasite drug but

often heals 2-12 months without treatment.

Bite of the sand fly, red itchy bump. Can

develop as a skin ulcer (open wound), scab on face, arms, and legs.

Yaws (Treponematoses)- *Recommended treatment:* Azithromycin. *Vanuatu treatment:* Go to health center or hospital for testing, treatment not



mentioned. Treatment azithromycin, mass drug administration.

Impetigo: *Recommended treatment:* 2% mupirocin ointment, oral dicloxacillin for severe cases. *Vanuatu treatment:* Benzyn Benzoate.



B Boils: Raised, red, warm, pus filled bump



caused by an infection after an injury or break in the skin, an insect bite, or clogged hair follicle. *Recommended treatment:* Warm

compresses, soaking, and if large I&D (incision and drainage by trained professional) with antibiotics. *Vanuatu treatment:* Warm compress, magnesium Sulphate paste/ Ichthammol paste.

Hay, R. J., Johns, N. E., Williams, H. C., Bolliger, I. W., Dellavalle, R. P., Margolis, D. J., ... Naghavi, M. (2014, June). The global burden of skin disease in 2010: An analysis of the prevalence and impact of skin conditions. *Journal of Investigative Dermatology*, 134, 1527-1534. <https://doi.org/10.1038/jid.2013.446>

Kline, K., McCarthy, J. S., Pearson, M., Loukas, A., & Hotez, P. J. (2013, January 31). Neglected tropical diseases of Oceania: Review of their prevalence, distribution, and opportunities for control. *Public Library of Science: Neglected Tropical Diseases*. <https://doi.org/10.1371/journal.pntd.0001755>

Taleo, F., Macleod, C. K., Marks, M., Sokana, O., Last, A., Willis, R., ... Solomon, A. W. (2017, January 24). Integrated mapping of yaws and trachoma in the five Northern-most provinces of Vanuatu. *Public Library of Science: Neglected Tropical Diseases*. <https://doi.org/10.1371/journal.pntd.0005267>