TO WHOM IT MAY CONCERN

FAO of Medical Professional  Re. Seal Bites

As you may be aware, “seal finger” is the colloquial term used to describe cellulitis/infection of any part of the body as a sequel to a seal bite or skin wound contaminated from the environment where seals are kept.

It is not uncommon in people working with seals, and is usually associated with Mycoplasmal infection. As such, it is unresponsive to many commonly prescribed antibacterials.

Workers have found that the prophylactic use of a tetracycline antibacterial as soon as possible after a wound is sustained reduces the risk of infection developing. Furthermore, where clinical infection is already established, tetracyclines appear to be the recommended first choice for treatment.

Reference abstracts are attached for your interest.

Yours faithfully,

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REFERENCES FOR SEAL FINGER:

Seal finger
Lancet Vol 364 July 31, 2004 M R Lewin, P Knott, M Lo

Outside Scandinavia, Greenland, and the Canadian Arctic, seal finger is regarded as unusual. It is probably caused by marine mycoplasma found in the mouths and bodily waste of Pinnipedia. Traditionally an occupational hazard of seal hunters, it is increasingly common in wildlife workers. Symptoms may appear 1 day to 3 weeks after exposure. Since mycoplasma lack a cell wall, the disease does not respond to beta-lactam antibiotics. Prompt recognition and treatment with the correct antibiotics is essential to prevent permanent disability. The patient’s symptoms resolved with a 4-week course of tetracycline.

Seal finger—a problem among hunters once again
Lakartidningen. 2004 May 19;101(21-22) Staby M.

Seal finger is an infectious disease unknown to most physicians. It occurs after contact with seals, and the symptoms include acute pain, swelling, and, in some cases, joint involvement. The etiologic agent of seal finger is now believed to be a Mycoplasma, and treatment with high dose tetracycline has been successful for over 50 years.

Seal finger—tetracycline is first line.
Public Health Laboratory, Truro.

Seal finger and other infections transmitted from seals

Seals and other Pinnipedia my carry a range of infectious agents which could be of clinical interest. Bites and other forms of direct and indirect contact carry a risk of development of seal (or blubber) finger. This entity encompasses oedema of the affected finger, swelling of the interphalangeal joint adjacent to the lesion, and no suppuration. The condition is extremely painful and may lead to residual dysfunction or amputation. There is circumstantial evidence that the condition is caused by mycoplasma, and Canadian researchers have identified three species, one of which has been directly linked to blubber finger. At the first medical contact after seal bites and other seal-inflicted lesions thorough cleansing with water and soap is recommended. Systemic therapy with tetracycline is recommended, but both fluorquinolones and macrolides may be efficacious.

Eadie PA, Lee TC, Niazi Z, Lawlor D.

We describe a case of septic arthritis of the interphalangeal joint of the thumb in a man following a seal bite. Early and continued treatment with antibiotics of the penicillin family failed to control the infection. Empirical treatment with tetracycline resolved the infection, but the patient has permanent joint damage. In apparently ordinary infective conditions, which fail to respond to therapy, the history may
suggest that an unusual organism is responsible.

*Bergholt A, Christensen RB, Cordtz T.*

Seal finger is a well described disease as to symptoms and signs, but the etiology is still unknown. The disease may often be prevented and tetracycline has proved effective.

*Bykerk VP, Tannenbaum H.*

We describe a case of monoarthritis in an Inuit seal hunter, which, despite early and aggressive sequential antibiotic therapy with ampicillin, cloxacillin and penicillin G, progressed to joint destruction of the distal interphalangeal joint. In retrospect, had the entity of seal finger been diagnosed at the onset, appropriate antibiotic therapy with tetracycline may have prevented permanent joint damage.


Two young women developed septic arthritis in an interphalangeal joint following a seal bite. One patient was cured with tetracycline: the other required joint arthrodesis. This entity known as "seal finger" is common among sealers. Although the infection may be cured with tetracycline, in late treated or untreated cases joint destruction may occur.