



Seal or Sea Lion Bite Trauma

Dear Medical Professional,

The individual with this letter is a student, staff, or researcher at University of California, Santa Cruz, and has been bitten by a seal or sea lion. Seal and sea lion bites commonly develop a painful and potentially debilitating condition often referred to as "seal finger." People have also developed "seal finger" from animal claw punctures, secondary contamination of an existing open wound, or puncture by an infected hypodermic needle or other sharp object. Seal finger is generally characterized by excessive swelling and pain around the wound and can lead to progressive arthritis of the local joint and beyond.

The causative agent of seal finger is strongly suspected to be *Mycoplasma* sp, such as *M. phocacerebrale*. The causative agent has often been reported to be *Erysipelothrix* sp., which is commonly associated with fish handling, however this is less likely to be the cause of seal finger via a bite wound. Numerous other types of bacteria such as *Vibrio* sp. can also be transmitted through a seal or sea lion bite, or other contact with a marine mammal.

Due the potential for *Mycoplasma* sp. associated infection from seal or sea lion bites, tetracycline antibiotics may be indicated for treatment in addition to lavage and topical antiseptics. Our goal with this letter is not to dictate a course of treatment, but to increase awareness of the potential role of *Mycoplasma* in these cases.

If you have any questions regarding marine mammal bites or contact, please do not hesitate to call Dr. Megan Moriarty, DVM, MPVM, PhD, Campus Veterinarian for UC Santa Cruz (tel. 831-713-6722 or email: mmoriart@ucsc.edu). If you are unable to reach Dr. Moriarty, you are welcome to contact **Patrick Robinson (831-708-8094)** who can direct you to the onsite veterinarian to help you; please remember that this might be a return call when she is not attending to the patients.

A few relevant references are provided below, and thank you for your consideration.

CP White, DD Jewer. 2009. Seal finger: A case report and review of the literature. *Canadian Journal of Plastic Surgery*: 17(4):133-135.

Nuckton TJ, Simeone CA, Phelps RT. 2015. California sea lion (*Zalophus californianus*) and Harbor seal (*Phoca vitulina richardii*) bites and contact abrasions in open-water swimmers: A series of 11 cases. *Wilderness and Environmental Medicine* 26(4):497-5508