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WALRUS ASSOCIATED TRICHINOSIS IN HOOPER BAY AND POINT HOPE

Follow-up of a reported case of trichinosis from the Bethel PHS Hospital has led to 15 further presumed cases in Hooper Bay. In each case symptoms and/or significant eosinophilia occurred following ingestion of the incriminated walrus meat. The walrus was prepared by boiling, however thorough cooking probably did not occur since the central portions of the meat was preferred relatively raw. Serologic confirmation of these cases is pending.

Ten days following the reported case in Hooper Bay another walrus associated case was reported from the Kotzebue PHS Hospital. The individual reported in this incident was from Point Hope.

The Hooper Bay cases are of particular interest since they represent the southern-most walrus-associated trichinosis cases reported in Alaska. The reasons for this unusual occurrence are not clear. Recent walrus kills have been exceptionally good throughout the west coast of Alaska. This and the unusually broad range of walrus sightings this year has led many observers to believe that the herd size is exceptionally large. If this is true, competition for food may have lead to increased numbers of *Trichinella spiralis* infected walrus. Alternately the wider distribution of walrus this season may have brought previously infected animals further south than usual.

The purpose of this report is to help increase awareness of possible human trichinosis since if increased numbers of animals are infected, we would expect more human cases to occur as the walrus follow the ice north. The Point Hope case suggests this may be the case.

Many cases of trichinosis may be asymptomatic or symptomatic of non-specific infectious illness, i.e., mild gastrointestinal complaints followed by light fever, headache, malaise, and myalgia. Cases with periorbital edema and/or rash easily suggest the diagnosis. However, often a complete blood count may provide presumptive information since most cases, even when asymptomatic, demonstrate significant eosinophilia. Greater than 5% eosinophilia is highly suspicious in patients with a history of possible exposure and compatible illness. Frequently eosinophilia in the range of 20-60% occurs. Serologic confirmation can be obtained by bentonite flocculation testing.

All possible cases should be reported as there is rarely just a single case and further investigation is always warranted. Any mammal can be potentially infected; therefore, all meats should be thoroughly and completely cooked. There is considerable evidence to suggest fermentation followed by extended freezing is not protective in the arctic.