



Copies of any bulletin may be ordered by calling the Section of Epidemiology at (907) 269-8000
or by writing to us at PO Box 240249, Anchorage, Alaska 99524-0249

Bulletin No. 4
March 11, 1974

Meningococcal Disease in Anchorage

On February 13, 1974, a 15-year-old Caucasian male was admitted to Elmendorf AFB Hospital following a several day history of sore throat, fever, and several hours prior to admission the onset of headache, stiff neck and purpura. The presumptive diagnosis of meningococcal septic shock was made (later confirmed by culture). The family of the patient was treated with meningococcal prophylaxis. The patient has since recovered.

A second case of meningococemia occurred on February 28 in an 18-year-old female. The patient had a fulminant course over 12 hours and was dead on arrival at Community Hospital. The findings were consistent with meningococemia and this was confirmed with a positive blood culture. The patient's boy friend and emergency room staff were treated with prophylactic antibiotics.

Investigation has revealed no connection between the two cases. While it is unusual to have two cases in such close proximity, in no way is this indicative of an epidemic. The annual incidence of meningococcal disease is one per 100,000 people.

Questions always arise as to who should be treated with prophylactic antibiotics. It is felt that work, school and hospital contacts of a patient are at no greater risk of contracting the disease than the general population. However, immediate family contacts are felt to be at a slightly greater risk. For this reason the Public Health Service recommends that only immediate family contacts be treated. There is generally no need to culture household contacts for meningococcus. It is best to assume that household contacts are at risk and, consequently, all should receive prophylaxis. Obviously, exceptions may occur to the above guidelines, such as an emergency room staff performing resuscitative measures. By and large, however, it is best to reassure work, school and hospital contacts that they are at no increased risk and to withhold prophylaxis for immediate family members only.

Penicillin remains the treatment of choice for meningococcal disease, however, the antibiotics of choice for meningococcal prophylaxis are rifampin or minocycline. Dosage for these medications are as follows:

Meningococcal Prophylaxis:

- a) Rifampin - adult: 600mg orally once daily for 5 days.
- child: 10-20mg/kg orally once daily for 5 days.

OR

- b) Minocycline - adult: 100mg every 12 hours for 5 days.
- child: Not recommended for children under 8 or pregnant women.

(Reported by Dale Webb, M.D., Gary Archer, M.D., Sherman Beacham, M.D., Michael Propst, M.D., and Joseph Pollock, M.D.)