



Rocky Mountain Spotted Fever: On the Rise Across Arizona?

Parents come into your pharmacy with a prescription for doxycycline for a child less than eight years old. It's late at night and you are unable to consult the physician to double check the prescription. You know that at high doses for an extended period, doxycycline can cause teeth staining. You are reluctant to fill the script. But, in this case the prescription is intended to treat a suspected Rocky Mountain Spotted Fever (RMSF) infection. By filling this script tonight, you may be saving a young life.

RMSF is an increasing disease threat in Arizona. To date, RMSF cases and outbreaks have been reported on Tribal Lands in eastern, southern and central Arizona, and there is evidence of RMSF now in northern Arizona. Since 2002, over 260 cases have been reported, and 18 cases (6.9%) have been fatal. The case fatality rate in Arizona is almost 20 times higher than the national average.

RMSF is a serious illness that can be fatal if not treated promptly and correctly. Doxycycline is the treatment of choice for adults and children of all ages and should be initiated immediately whenever RMSF is suspected. Use of antibiotics other than doxycycline is associated with a higher risk of fatal outcome. Treatment is most effective at preventing death if doxycycline is started in the first 5 days of symptoms.

The following are the recommended treatment dosages for doxycycline:

- Adults: 100 mg every 12 hours
- Children under 45 kg (100 lbs): 2.2 mg/kg body weight given twice a day

Patients should be treated for at least 3 days after the fever subsides and until there is evidence of clinical improvement. Standard duration of treatment is 7-14 days.

Treatment should never be delayed pending the receipt of laboratory test results. The diagnosis of RMSF must be made based on clinical signs and symptoms, and epidemiologic clues, such as residency or travel to endemic areas.

Treating Children

The use of doxycycline to treat suspected RMSF in children is standard practice recommended by both CDC and the AAP Committee on Infectious Diseases. Use of antibiotics other than doxycycline increases the risk of patient death. Unlike older tetracyclines, the recommended dose and duration of medication needed to treat RMSF has not been shown to cause staining of permanent teeth, even when five courses are given before the age of eight. Healthcare providers should use doxycycline as the first-line treatment for suspected Rocky Mountain spotted fever in patients of all ages. Please Note: RMSF patients from Tribal Lands are commonly seen by physicians in Metropolitan areas. Prescriptions for doxycycline for RMSF treatment can therefore be presented at any pharmacy.

For more information about RMSF, please refer to the Centers for Disease Control and Prevention (CDC) website: <http://www.cdc.gov/rmsf>