mortality among adults has not been reported. Mortality attributed to severe systemic complications (e.g., endocarditis, myocarditis, meningitis, pneumonia, or multiple organ failure) has been documented in certain adult patients. Both patients described in this report died within 12 hours of presentation, allowing little opportunity for assessment and treatment. These case reports demonstrate that infection with S. moniliformis can cause fulminant sepsis and death in previously healthy adults. As a result, prevention of severe disease might depend on increasing the awareness of appropriate risk-reduction activities and possible symptoms of RBF among persons who have exposure to rats. Intravenous penicillin is the treatment of choice, and prompt therapy can prevent severe complications. Because rapid laboratory confirmation of infection with S. moniliformis might not be possible, clinicians should consider initiating empiric therapy for patients with a compatible clinical presentation and exposure history.

Clinicians should consider RBF in the differential diagnosis for unexplained febrile illness or sepsis in patients reporting rat exposure. Initial symptoms might be nonspecific (Box), but a maculopapular rash and septic arthritis commonly develop. However, as demonstrated by the cases in this report, patients can have severe disease before the onset of typical symptoms. Despite its name, approximately 30% of patients with RBF do not report having been bitten or scratched by a rat. Risk factors for RBF include handling rats at home and in the workplace (e.g., laboratories or pet stores). RBF is rare in the United States, with only a few cases documented each year. However, because RBF is not a nationally notifiable disease, its actual incidence has not been well described.

In the cases described here, diagnosis of RBF was delayed in part because of the inability to rapidly isolate or identify S. moniliformis. If infection with S. moniliformis is suspected, specific media and incubation conditions should be used (Box). In the absence of a positive culture, identification of pleomorphic gram-negative bacilli in appropriate specimens might support a preliminary diagnosis. In the event of an unexplained death in a person with rat exposure, performing an autopsy might also be critical to identifying an etiology.

Because of the high prevalence of colonization and asymptomatic infection with S. moniliformis among rodents (Box), testing and treatment of rats is not practical. Disease prevention should center on risk reduction among persons with frequent rat exposure. Adherence to simple precautions while handling rats can reduce the risk for RBF and other potential rodent-borne zoonotic infections, wound infections, and injuries. Persons should wear gloves, practice regular hand washing, and avoid hand-to-mouth contact when handling rats or cleaning rat cages. If bitten by a rat, persons should promptly clean and disinfect the wound, seek medical attention, and report their exposure history. A tetanus toxoid booster should be administered if ≥10 years have lapsed since the last dose.

Clinicians should contact their state health departments for assistance with diagnosis of unexplained deaths or critical illnesses and cases or clusters of suspected RBF or other zoonotic infections. UNEX coordinates surveillance for unexplained deaths possibly attributed to infection throughout the United States. Cases are reported by a network of health departments, medical examiners/coroners, pathologists, and clinicians. Epidemiologic and clinical data are collected, and available clinical and pathologic specimens are obtained for reference and diagnostic testing at state, CDC, and other laboratories. State and local health departments may contact UNEX for assistance with the evaluation of unexplained deaths that occur in their jurisdictions.

REFERENCES

10 available

Publication of Health, United States, 2004
With Chartbook on Trends in the Health of Americans

MMWR. 2004;53:1136

CDC has published Health, United States, 2004 With Chartbook on Trends in the Health of Americans, the 28th edition of the annual report on the nation's health. The report includes 153 trend tables organized around four subject areas: health status and determinants, health-care use, health-care resources, and health-care expenditures. Information regarding racial, ethnic, and socioeconomic disparities in health is presented in several tables.

The 2004 chartbook included in the report assesses the state of the nation's health and how it has changed over time, both positively and negatively, by presenting trends and current information on selected determinants and measures of health status. Determinants of health include demographic factors, health-insurance coverage, health behaviors, and preventive health care; measures of health status focus on trends in mortality and limitations of activity caused by chronic health conditions. Although the health of persons overall in the United States has improved, the health of certain populations has lagged behind. This year’s chartbook also includes a special section on prescription drugs, which have become an increasingly important component of health care.

The report is available from the National Center for Health Statistics at http://www.cdc.gov/nchs/hus.htm. Additional information is available by telephone at 301-458-4636 or by e-mail at nchssurvey@cdc.gov.