**Erysipelothrix rhusiopathiae** Septicemia in a Neonate

*Erysipelothrix rhusiopathiae* is a gram-positive bacillus that is found in decaying nitrogenous waste. The organism can colonize some animals, including rats, and is a cause of disease in a wide variety of animals, most commonly pigs. It is believed that soil becomes contaminated with *E. rhusiopathiae* via animal excrement [1]. Disease in humans nearly always occurs after occupational exposure, such as work in an abattoir, handling fish, butchery, or farming [2, 3]. We describe what we believe is the first reported case of *E. rhusiopathiae* septicemia in a neonate.

A baby girl was admitted to Baragwanath Hospital (Soweto, South Africa) on the day of her birth. Her mother, who lived in a squatter camp in Soweto, went into labor at 34 weeks of pregnancy. She delivered the baby herself on the ground outside her shack. The mother and her infant were taken to Baragwanath Hospital. The baby, who weighed 1.66 kg and was small for gestational age (1.66 kg), was admitted for observation.

On the fourth day after admission, she developed apneic attacks and had a temperature of 39.7°C. During that day, a rash appeared on the trunk and extremities (including the palms of the hands). It resembled erythema multiforme, with erythematous plaque-like target lesions. She also had hepatosplenomegaly and mild jaundice. The WBC count was elevated (17.5 × 10^9/L with 70% neutrophils, 16% lymphocytes, and 14% monocytes). The hemoglobin concentration, platelet count, and results of renal function tests were within normal limits.

Treatment with intravenous cefotaxime (100 mg/[kg • d]) and amikacin (15 mg/[kg • d]) was continued for a total of 5 days. A blood culture (Bactec 460 system; Becton Dickinson, Sparks, MD) yielded pure growth of *E. rhusiopathiae*, and identification was confirmed with the apiCORYNE system (bioMerieux, Marcy l’Etoile, France). The condition of the baby improved rapidly, and her rash cleared; she was discharged 6 weeks later. Relatives could not identify any contacts with a relevant occupational history.

Two months after discharge, the baby was readmitted with a history of diarrhea and poor feeding. She weighed 3 kg and had marasmus. A blood culture yielded *Salmonella* species. Antibodies to HIV were detected in her serum by means of ELISA; however, p24 antigen was not detected. She responded well to a course of intravenous cefotaxime and began to gain weight. She was discharged after 1 month.

Conditions in a squatter camp are poor. Domestic animals may be roaming around, and rats are common. Decaying organic material may be present. Such conditions would seem to be suitable for *E. rhusiopathiae* contamination. We postulate that the neonate described herein acquired *E. rhusiopathiae* infection at birth because she was exposed to contaminated soil as a result of the poor hygienic conditions in the squatter camp.

Investigators have previously commented on the similarity of the rash of *E. rhusiopathiae* septicemia to those of erythema multiforme or meningococcal septicemia [4]. *E. rhusiopathiae* septicemia is frequently complicated by endocarditis, although our patient did not have this complication. To our knowledge, *E. rhusiopathiae* infection complicating AIDS has not been described. So far, we have been unable to prove that the patient was infected with HIV, as p24 antigen was not detected. A definitive diagnosis of congenital HIV infection will be delayed until the level of maternal antibodies has declined. Immunocompromise associated with prematurity, possibly complicated by HIV infection, may have resulted in the severe septicemic form of *E. rhusiopathiae* infection seen in this patient.

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References