

World Congress on **Infectious Diseases**

August 10-12, 2015 London, UK

Nosocomial infection of laboratory animals caused by bacteria borne in a human hospital

Ze'ev Katzir

E Wolfson Medical Center, Israel

Most animal hazards in laboratories are widely recognized. These together with zoonosis and other possible insults, are subject to the establishment of guidelines for the operation and maintenance of such facilities. Most of the infectious diseases described among laboratory animals are related to the inadequate implementation of preventive and quality control policies. These included surgical, respiratory and intestinal tract infections, and typically spread between animals. This report is about an outbreak of nosocomial bacterial infection in rats held in the research laboratory of a human hospital. Symptoms of general infection were runny nose and sneezing, excessive lachrymation, dyspnea, loss of appetite, limited activity and disheveled fur, which appeared in two rats initially, and spread to another 60. A common characteristic physical finding observed later was a lump under the skin, with subsequent ulceration. Mortality was 70%.

Blood cultures were sterile. Accurate diagnosis was possible only after examination of tissue sampled from the diseased and dead rats. Histology showed an excessive proliferative and inflammatory reaction.

Bacteriology analysis revealed the presence of three types of hospital-borne bacteria: enterococcus, coagulase-negative staphylococci and *Acinetobacter radioresistens*, with common sensitivity to ciprofloxacin and ceftazidime. Empiric antibiotic therapy was switched to a bacteriology-based regimen. Complete recovery was achieved among the diseased rats that survived the previous antibiotic therapy. This is the first written description of a nosocomial infection of laboratory animals caused by bacteria borne in a human hospital. Medical staff-to-animal transmission is suggested. A high index of suspicion and prompt diagnostic evaluation are essential for successful management, and preventive guidelines concerning such events need to be established.

zkatzir1@walla.com

Notes: