Staphylococcal zoonosis on dairy farms in Assam and Meghalaya.

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Abstract

OBJECTIVE: To assess if Staphylococcus aureus is transmitted between man and animals & vice-versa.

METHODS: Staphylococcus aureus belonging to biotype C (bovine origin) were isolated from nares and hands of workers on six dairy farms of Assam and Meghalaya. The cows on the farms had a high rate of prevalence of mastitis caused by the same biotype of S. aureus. Three strains of S. aureus biotype A (human origin) were isolated from mastitis milk samples from cows on one of these farms, in which one of the workers was having cutaneous lesions (crusty abscess) and one strain of S. aureus biotype A was isolated from a swab sample collected from an abscess on the skin of the worker.

RESULTS: It has been revealed that all the members of the workers family were suffering from a similar type of cutaneous infection, indicating that it was a case of impetigo. The antibiotic susceptibility pattern of all the three biotype A strains from bovine origin was identical to that of the biotype A strains isolated from the worker. The percentage of resistance to 12 commonly used therapeutic antimicrobial agents was higher among the biotype C strains from human origin than the biotype C strains from bovine origin. Several strains from cattle and human origins showed identical antimicrobial susceptibility patterns against the tested agents.

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