

CHARACTERISTICS OF STREPTOCOCCI OF BUFFALO UDDER ORIGIN

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SUMMARY

The biochemical characteristics of 41 streptococcal strains, isolated from milk samples of buffaloes in Iraq, have been described. On examining them serologically for Lancefield grouping, 25 (60.97%) were placed in group B, 10 (24.40%) in group C, 2 (4.88%) in group D and 1 (2.44%) in group A. Three of the isolates, which failed to react with the available sera, were classified as *Str. uberis* on the basis of biochemical activities.

The isolation of *Str. pyogenes* from a case of mastitis appears to be a first report in Iraq; its importance from public health point of view has been emphasized.

Mastitis in dairy animals is known to be associated with different strains of streptococci. The prevalence rate of different streptococcal udder infections in buffaloes in Iraq has already been reported (Yass *et al.*, 1983). This communication presents the biochemical characteristics and serological grouping of the different streptococcal isolates from buffalo milk samples.

MATERIALS AND METHODS

The source of material and the procedure employed for the isolation of streptococci from the milk samples obtained from buffaloes have been reported in an earlier communication (Yass *et al.*, 1983). The streptococcal isolates after getting them in pure cultures were inoculated into the serum broth tubes and examined after 24 hours incubation

at 37°C for their morphology, particularly the arrangement of cocci, whether in two, short chains or long chains. For identification, the isolates were then subjected to different biochemical tests, as suggested by Carter (1978). This included fermentation of sugars, like sorbitol, mannitol, salicin, lactose, raffinose, trehalose and inulin, hydrolysis of sodium hippurate and esculin, and changes in litmus milk. The streptococcal isolates were also tested serologically for Lancefield group identification, using a rapid latex test system 'Streptex' employing the procedure recommended by Wellcome Research Laboratories, London.

RESULTS AND DISCUSSION

Of the 41 streptococcal isolations made from the buffalo milk samples, 25

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