A NEW SALMONELLA SEROTYPE, SALMONELLA BURY
(4, 27, 12 : c - z₆) OF HUMAN ORIGIN

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A baby girl aged two years entered Booth Hall Hospital in February, 1953, suffering from an acute respiratory infection, and with a history of having had mild diarrhoea for three days prior to admission. The temperature, which had been 100°F on admission, returned to normal in a few days and the child was discharged from hospital after 5 days. A diagnosis of bronchopneumonia was made, but in view of the history of a recent gastro-intestinal upset the faeces were examined and an organism of the salmonella group was isolated.

The child lived in a house situated within a few yards of a knackery. The father of the child, who was a cattle dealer and the owner of the knackery, constantly handled the carcasses of diseased farm animals.

On MacConkey and nutrient agar plates the microorganism produced colonies typical of those of the salmonella group. Glucose, maltose, mannitol, dulcitol, sorbitol, arabinose, rhamnose, xylose, trehalose, and inositol were fermented with the production of acid and gas within 24 hours incubation. After 30 days incubation there was no fermentation of lactose, sucrose, salicin, adonitol, inulin, or raffinose; gelatin was not liquefied; neither urease nor H₂S was produced. The strain was M.R.+, V.P.-, indole- and d-tartrate+. Both citrate and mucate were utilised.

Serological examination showed that the organism was agglutinated to titre by a S. schleissheim (4, 27, 12) serum, and that S. schleissheim was agglutinated to titre by a serum made with the new serotype. Reciprocal absorption tests proved that their somatic antigenic structure was identical (4, 27, 12). The new serotype was diphasic, phase 1 being agglutinated to titre by a S. deversoir H (c) serum, and

phase 2 by a *S. kentucky* H (z₆) serum. Reciprocal absorption tests of these sera and of the serum made with the new serotype confirmed the flagellar antigenic structure as c - z₆.

SUMMARY

A new salmonella serotype with the antigenic structure 4, 27, 12 ; c - z₆ has been described. The proposed name is Salmonella bury.