NOTES

New Salmonella Serovar, Salmonella eingedi [61,62,7:f,g,t:1,(2),7]

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A new Salmonella serovar, Salmonella eingedi, was isolated from the intestinal content of a snake, Coluber rhodorhachis, and later also from the diarrheal stools of two children.

A new Salmonella serovar, Salmonella eingedi, is described. The strain (no. 4373) has been isolated from the intestinal contents of a snake (Coluber rhodorhachis). The name Eingedi is of the kibbutz, on the shore of the Dead Sea, where the snake was captured. It presented the morphological and cultural characteristics of Salmonella subgenus I, being aberrant only in a slowly positive malonate test.

Serological analysis. (i) Somatic antigens. Agglutination tests with absorbed Salmonella O-factor sera showed positive reaction in the factors 61, 62, and 7, and negative reaction in O:8 and O:14 factor sera.

(ii) Flagellar antigens. The specific phase of S. eingedi reacted with the HB polyvalent serum and with the H-sera g,m and g,p. It reacted with the single-factor sera f and t. An antiserum against phase 1 (f,g,t) of this culture agglutinated the homologous antigen at 1/6,400, the f,g,t antigens of Salmonella afula and Salmonella bilu at 1/1,600, and that of Salmonella berta at 1/200. The absorption of the f,g,t serum of S. eingedi by the f,g,t antigens of S. afula and S. bilu strongly reduced the titer of the serum. However, absorption with the f,g,t antigen of S. berta reduced the titer for S. eingedi insignificantly.

The nonspecific flagellar phase of S. eingedi reacted with the HE polyvalent serum and with the single factor sera 2 and 7. The reaction in the H:2 factor serum was weak. The absorption of the 1,(2),7 serum of S. eingedi by the 1,(2),7 antigen of S. bilu removed all agglutinins.

Discussion. The flagellar antigens f, g, and t are found together in a very limited number of Salmonella serovars of subgenus I: S. afula, S. berta, S. bilu, S. eingedi, and S. maiduguri. Among these, three serovars were isolated first in Israel. The flagellar phase f,g,t is more frequent in subgenus II and was found in the O-groups B, G, J, N, S, U, and O:65.

The phase 2 flagellar antigens 1, 2, and 7 represent an even more rare combination, found so far only in S. bilu, S. eingedi, and Salmonella bornheim (subgenus II), and rarely in Salmonella montevideo.

S. eingedi was first isolated in July 1977 from a snake captured near the Dead Sea. This new serovar was also isolated some weeks later from a child with diarrhea in the Kibbutz Horashim (region Hasharon, near Tel Aviv) and again in October 1977 from another child with diarrhea from the same kibbutz.

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