A SALMONELLA STRAIN (1, 6, 14, 25:l, v:l, 7) WHICH
COMPLETES THE ANTIGENIC FORMULA
OF SALMONELLA BOECKER

Ömer Özek, Enver Tali Çetin, Özdem Anç
and Kurtuluş Töreci

Institute of Microbiology and Contagious Diseases,
Medical Faculty, University of Istanbul, Istanbul, Turkey

SUMMARY. A salmonella strain with antigenic formula (1, 6, 14, 25:l, v:l, 7) was isolated from tortoises in Istanbul. This strain is similar to S. boecker except it contains somatic antigens 1 and 25. It is proposed that the antigenic formula of this strain should be accepted as representative for S. boecker in the Kauffmann-White schema.

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In a study concerning the presence of salmonellae in the feces of tortoises (Testuda graeca) captured in Istanbul, a salmonella strain with antigenic formula 1, 6, 14, 25:l, v:l, 7 was isolated. This strain produced acid and gas from arabinose, dulcitol, galactose, glucose, xylose, levulose, maltose, mannitol, rhamnose, sorbitol and trehalose but not from inositol, lactose, raffinose and sucrose. It produced abundant H₂S, no indole and did not liquefy gelatin or coagulated serum. It grew on Simmons' citrate medium, gave positive methyl-red and negative Voges-proskauer and KCN reactions.

In the Kauffmann-White schema, there is no strain identical with this strain which belongs to group H. The serotype most similar in the schema is S. boecker, which does not contain somatic antigens 1 and 25. We failed to show a biochemical difference between our strain and S. boecker. According to these findings, we regard our strain as one which completes the antigenic formula of S. boecker, instead of being accepted as a new serotype. S. charity offers a similar example. When S. charity was first reported, its antigenic formula was shown to be 6, 14:d:e, n, x (Kauffmann 1957). Afterwards, some strains with additional 1 and 25 antigens were isolated and the antigenic formula of S. charity

is now recognized as 1,6,14,25:d:e,n,x. The strains with more antigens are generally accepted in the Kauffmann-White schema as representatives of the serotypes and the strains with antigenic deficiencies as variants (e.g., S. paratyphi A and S. paratyphi A var. durazzo; S. paratyphi B, S. typhimurium and their variants with antigenic deficiencies). Accordingly, we propose that S. boecker should be shown in the Kauffmann-White schema with the antigenic formula of our isolate (1,6,14,25:l,v:l,7) and the strain which is now known as S. boecker (6,14:l,v:l,7) should be accepted as a variant, lacking the somatic antigens 1 and 25.

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REFERENCE

- Kauffmann, F. 1957. Das Kauffmann-White-schema; diagnostisches Salmonella-Antigenschema, Erg. Mikrob. Immunforsch., 30:160-216.