

Letters to the Editor

Sacroiliitis Causing *Salmonella Typhi*

To the Editor: The clinical and laboratory features of two patients with sacroiliitis caused by *Salmonella typhi* have been comprehensively described in a recent issue of the *Annals*.¹ While one of the isolates was sensitive to ampicillin, chloramphenicol and co-trimexazole, the other was totally resistant to them. Both strains of the *S. typhi* responsible for two of the five known cases of sacroiliitis should be characterized for chromosomal electrophoresis pattern, plasmids and Vi phage patterns. Chromosomal DNA from 52 isolates of *S. typhi* was digested with three restriction endonucleases and subjected to a pulse-field gel electrophoresis (PFGE). The isolates from Papua, New Guinea, were reported to be sensitive to 16 antibiotics, and were devoid of plasmids.² The PFGE pattern combination of X1S1A1 was manifest in all isolates from patients with fatal typhoid fever, while patients with non-fatal infections exhibited different combinations. PFG electrophoresis performed on two strains from Qatar for their pattern combinations might establish both qualitative and quantitative polymorphism characteristics that might be linked to the potential of *S. typhi* isolates to cause sacroiliitis.¹ Knowledge of such PFGE characteristics might be predictive of aberrant manifestations of *S. typhi* attributable to their multiplication at rare and unusual sites in the body. It would be desirable to examine these isolates for the presence of plasmids, especially the high-molecular-weight ones commonly associated with antibiotic resistance of *S. typhi*. They could complicate the interpretation of PFGE patterns through their DNA fragments.³ The two strains differ in their antibiotic sensitivity pattern.¹ They might differ in their Vi polysaccharide quantum and phage-typing profile. Many strains of *S. typhi* have an antigen and cannot be typed by Vi phages. Such strains have been widely known since the 1960s.⁴ Between 1990 and 1993, of the 1500 strains of *S. typhi* isolated in South Africa, 125 were Vi-negative and could not be typed by Vi phages.⁵ In Qatar, where approximately 40 new cases of typhoid are diagnosed annually, a surveillance of Vi-negative *S. typhi* strains would be desirable to ascertain the possibility of success of Vi-polysaccharide vaccine for *S. typhi* infection. In all probability, Vi antibodies induced by Vi-polysaccharide vaccine would not be protective against episodes of typhoid fever caused by Vi-polysaccharide *S. typhi*.

Subhash C. Arya, MBBS, DCP, DipBact, PhD
Centre for Logistical Research and Innovation

M-122 (of Part 2), Greater Kailash-II
New Delhi 110048
India

References

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4. International Committee for Enteric Phage Typing. The geographical distribution of *Salmonella typhi* and *Salmonella paratyphi* A and B phages during the period 1 January 1966 to 31 December 1969. *J Hyg Camb* 1973;71:59-84.
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Reply

To the Editor: I would like to thank Dr. Arya for his letter regarding my article in the *Annals*. I agree with Dr. Arya that the testing of the isolates for chromosomal electrophoresis pattern, plasmid and Vi phage pattern may be helpful in linking a specific pattern with the potential to cause sacroiliitis. However, I think that testing only two isolates will not be enough to reach a definite conclusion regarding an association, and, therefore, testing a large number of isolates would be more appropriate in this case. Unfortunately, such tests are not available in our hospital.

Dr. Hussam Alsoub
Hamad Medical Corporation
P.O. Box 3050
Doha, Qatar

Varicella Vaccine: A New Era of Live Herpes Vaccine

To the Editor: In his editorial, Dr. Al-Hajjar¹ mentions that the varicella vaccine has not been used in Saudi Arabia. In fact, varicella vaccine has been used at the Saudi Aramco Medical Services Organization since 1997. The vaccine is administered universally for all children over one year of age who are susceptible to varicella, and for varicella-susceptible health care workers.

Munir F. Rizkallah, MD
Pediatric Infectious Diseases Specialist

Saudi Aramco Medical Services Organization
Dhahran Health Center
Dhahran, Saudi Arabia

References

1. Al-Hajjar S. Varicella vaccine: a new era of live herpes vaccine. *Ann Saudi Med* 1997;17:501-2.

Reply

To the Editor: I would like to thank Dr. Rizkallah for his comment. The statement I made that “the varicella vaccine has not been used in Saudi Arabia,” was based on my communication with the major hospitals in Saudi Arabia and their affiliate medical centers (University Hospital,

Military Hospital, Security Forces Hospital, the National Guard Hospital and the Ministry of Health), in addition to reviewing literature generated from the Kingdom on immunization. Unfortunately, the Saudi Aramco Medical Services Organization is a private medical service with no information system allowing exchange with other institutions.

Sami Al-Hajjar, MD, FRCPC, FAAP

Consultant, Infectious Diseases
Department of Pediatrics, MBC-58
King Faisal Specialist Hospital and Research Centre
P.O. Box 3354
Riyadh 11211, Saudi Arabia