Nonenteric Salmonella Infections

To the Editor:—Isolated case reports of nonenteric Salmonella infections, such as that which recently appeared in this JOURNAL, suggest that such infections are rare. This concept of nonenteric Salmonella infection being rare, however, is no longer tenable, and its continued promulgation undoubtedly predisposes to missed diagnoses by unsuspecting clinical bacteriologists, which, in turn, tend to perpetuate the erroneous concept. In this laboratory, for example, three of the eight Salmonella isolates obtained in the last 18 months (July 1968 to December 1969) were from sources other than the intestinal tract. They are described briefly.

Case 1. A 17-year-old, healthy, afebrile, Caucasian girl presented with an osteolytic lesion of the wrist, the currettings of which grew a pure culture of Salmonella oranienberg. Stool cultures were negative for Salmonella. Further questioning of the patient revealed that she had been ill with Salmonella food poisoning over a year previously. This outbreak, involving several people patronizing a local restaurant, was due to a different species of Salmonella. The relationship, if any, between this and the wrist lesion remains unclear.

Case 2. A middle-aged, healthy, Caucasian nurse, was struck in the eye by the wing of an errant, apparently-ill bird. She subsequently developed a conjunctivitis which failed to respond to a topical sulfa preparation over a two-week period. Culture at that time grew Salmonella saintpaul. Stool cultures were negative for Salmonella. The conjunctivitis responded to Ampicillin.

Case 3. An elderly diabetic, Caucasian woman developed a chronic ulcerative lesion of the right great toe, culture of which yielded E. coli as the predominant organism and a salmonella species. The latter was a rough race when isolated, and despite many attempts by the Oregon State Public Health Laboratory, it could not be converted to a smooth race and serologic typing was not possible. Stool cultures were negative for Salmonella.

Although relationships between the infections of Cases 1 and 3 and possible enteric infections cannot be ruled out, it seems highly unlikely that such a relationship occurred in Case 2. Irrespective of this, however, Salmonella infections can and do become first manifest at sites other than the intestinal tract. Clinical bacteriologists, therefore, should be aware of this.

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Reference

Comment
Dr. Fuchs's comments help to emphasize that the initial enteric infection may be mild or essentially asymptomatic so that the first clinical manifestation requiring a clinical study is in some other organ. This has been known for many years and bone lesions are frequent manifestations of such conditions. In adults, the osseous lesions may make their clinical manifestation several years after the initial known symptoms of "typhoid" or "paratyphoid" fever. Whether it is called "rare," "infrequent," or "uncommon" depends upon many factors and is in the realm of academic semantics.—The Editors