

AUTHORS' ABSTRACTS

Medicine

Paratyphoid Infections. Jay D. Whitman, Washington, D. C., The Military Surgeon, November, 1916, p. 491.

Paratyphoid infections have been frequently encountered in the present European war. It is believed to be one of the principal causes of "trench diarrhea." Infection occurs nearly always through fecal contamination of food or drink. Carriers are common.

Two clinical types of the disease may be described, namely, the diarrheal and the bacteremic. The former is clinically a simple catarrhal gastro-enteritis.

The organism is found in the stool. A recent outbreak due to the "B" organism was observed by the writer in a community of 137 men, all of whom had recently been vaccinated against typhoid fever. Fifty-three were suddenly taken ill with moderate fever, diarrhea, abdominal pain, vomiting and headache.

The illness was of an average duration of three to four days. The "B" organism was found in the stools of nine out of twelve cases examined. Agglutinations were also positive. The method of infection could not be determined, but was probably due to contaminated food.

The second type of the disease clinically resembles a mild case of typhoid fever and undoubtedly the majority of cases are so diagnosed. Several cases of pericarditis, myocarditis and endocarditis have been described. Paratyphoid "A" is likely to produce symptoms resembling those of enteric fever, while the "B" organism frequently causes a condition of septicemia with a tendency to complications in the bones, glands and heart at times. In preventing paratyphoid infections, the anti-typhoid vaccine alone does not seem sufficient. Paratyphoid organisms should be added to make the vaccine potent.

Experimental Endocarditis: Its Production with Streptococcus Viridans of Low Virulence. H. K. Detweiler and W. L. Robinson, Toronto, Ont., the Journal of the A. M. A., December, 1916, p. 1653.

Experiments have been carried on with a view to determining the pathogenicity and virulence of the strains of streptococcus viridans isolated from the blood in cases of endocarditis less severe than the type commonly called subacute bacterial endocarditis, and in many cases milder even than those commonly recognized as simple endocarditis. These organisms produced in the rabbit with unexpected regularity, any degree of endocarditis from hemorrhage into the endocardium or muscle, to enormous vegetations on valves and mural endocardium. The degree seemed to depend upon the length of time the rabbit was allowed to live after inoculation. All inoculations were intravenous, and large doses were required to produce any effect.

In some instances, lesions were found in other organs and tissues, but there was no doubt as to

the preference of the organisms for the heart, both endocardium and myocardium.

Following this work, cultures of streptococcus viridans were obtained from the tonsils and teeth of normal mouths. That very similar results were obtained appears significant and seems to show that the ordinary saprophytic strains are closely allied to, and no doubt through lesions in tonsils or teeth, become the organisms we find in the blood stream.

CONCLUSIONS

1. The streptococcus viridans isolated from the blood in cases of chronic infectious endocarditis is of very low virulence, probably lower than any hitherto reported as being recovered from a similar source.

2. These streptococci are capable of producing lesions in animals identical with those found in the patients from whose blood the organisms were obtained.

3. The strains of streptococcus viridans isolated from the mouth of normal individuals are similar to those isolated from the blood of patients suffering from chronic endocarditis and are equally capable of producing heart lesions in the rabbit.

The Worth of An Early X-Ray Examination In Gastric Cancer. George M. Niles, Atlanta, Ga., Medical Record, December, 1916, p. 1025.

The author claims that the Roentgen ray, as a diagnostic aid in suspected or non-suspected cases of gastric cancer has won a recognized rank. He mentions some of the newer diagnostic processes, as the glycyltryptophan test, the phosphotungstic reaction of Wolff, the hemolysis test, and the modified Abderhalden reaction, but regrets that all of these have been weighed and found wanting in some particular. Two hapless conclusions are forced upon us: first, that a reasonably early diagnosis of gastric cancer from clinical data alone is impracticable; second, that when a clinical diagnosis of such can be readily made, the patient may well sell his earthly affairs in order.

Apart from pyloric obstruction, the diagnosis depends upon irregularities in contour caused by the inroads of the growth. In advanced cases the major part of the stomach cavity may be obliterated, showing an irregular shadow possessing no likeness to a normal gastric contour. Adhesions in the vicinity of the stomach, pylorus or duodenum may cause inroads difficult to differentiate from neoplastic growths; and such problems can only be intelligently solved by combined palpation under the screen and a liberal number of Roentgenograms.

In conclusion, the author asserts that when any individual in middle life rather suddenly develops indigestion, and when this indigestion cannot be satisfactorily explained by abnormalities of the circulatory system, the kidneys, the blood and blood-forming organs, or the central nervous system, a careful Roentgenologic examination is emphatically indicated.

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