

## NON-GONORRHOEAL AND NON-TUBERCULOUS EPIDIDYMITIS

BY IRVIN S. KOLL, M.D.

OF CHICAGO

THIS type of infection of the epididymis is now being recognized more frequently. Its frequency is much greater than was supposed. The conclusions drawn by the writer are taken from fourteen cases he has encountered in the past two years.

It is extremely difficult to assign a definite etiology to this variety of epididymal infection. In some instances no suggestion of a possible cause can be ascertained.

Trauma in various ways and degrees is evidently the factor most often accountable for the inflammatory and suppurating process that ensues. Direct blow upon the gland, squeezing of the scrotum between the legs when sitting down, were mentioned as causative in two of the cases. Instrumentation for urethral stricture was apparently accountable in three of the cases. In two instances there was direct extension from prostatospermatoecystitis. In the remaining seven cases no possible predisposing factor could be determined.

When it is remembered that 20 per cent. of the male urethras harbor from fifteen to thirty different strains of bacteria which, though usually non-pathogenic, may become pathogenic under various stimuli, it is not to be wondered that these bacteria invade the ejaculatory ducts, vas deferens and epididymis.

In the fourteen cases cited, eleven were due to the staphylococcus, one to the streptococcus (Figs. 1 and 2), and two to the colon bacillus (Fig. 3). Thirteen were unilateral, all occurring on the left side; and one bilateral, not simultaneously however, for the right epididymis became involved several days following operation upon the left.

The histopathology, which is all-important in making a definite diagnosis, shows all the changes of a pyogenic infection. Depending upon the virulence of the invading bacteria, the changes vary in intensity and degree. Round-cell infiltration, miliary or large abscess formation, is the picture seen in the acute and subacute cases; marked fibrosis with complete disappearance of the tubules in the chronic type. The associated pathology concerns the testicle. In only one case the infection extended to this organ. This was a very virulent strepto-

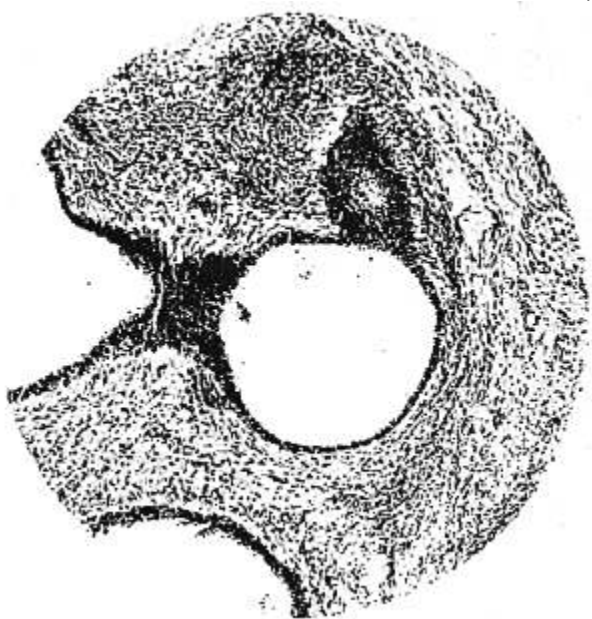


FIG. 1.—Acute streptococcal epididymitis, showing small abscess around a tubule.



FIG. 2.—Acute staphylococcal epididymitis, showing large abscess.



FIG. 3.—Acute colon bacillus epididymitis.

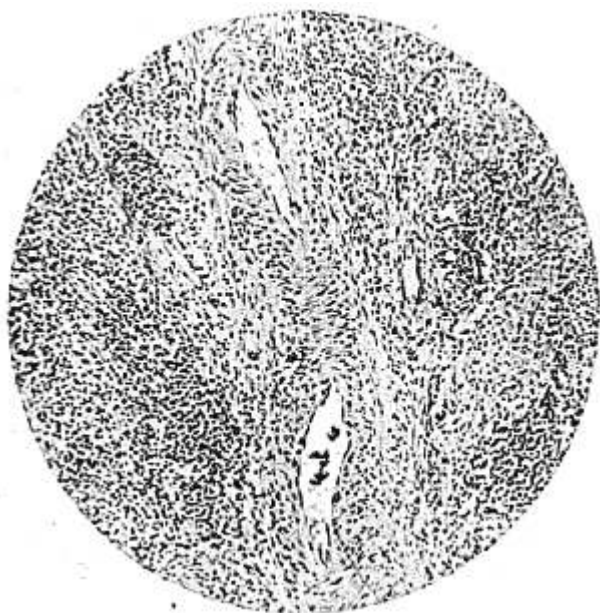


FIG. 4.—Chronic fibrotic epididymitis, clinically identical with tuberculosis of the epididymis.

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coccus invasion and also produced marked inflammation of the structures of the spermatic cord.

The clinical picture is either acute, subacute or chronic. The majority of the cases were chronic in their manifestation.

The acute onset is with severe pain along the spermatic cord and testicle. Exquisite tenderness promptly develops, the epididymis swells rapidly and the tunica vaginalis fills with exudate. The scrotum may become oedematous.

Symptoms of sepsis occurred several times. These were chills, temperature as high as 105° F., nausea and vomiting.

The condition may have to be differentiated from torsion of the cord.

The subacute variety is much less pronounced than its symptomatology. There is no systemic reaction. The pain, tenderness and swelling are promptly localized to the epididymis and are much less severe. The chronic type presents the greatest difficulty in diagnosis. Its onset and physical findings so closely resemble tuberculosis of the epididymis that it is utterly impossible to arrive at any final conclusion. To complicate this condition the prostate and the seminal vesicle on the same side may be enlarged and tender.

The treatment is unequivocally radical or operative. In the virulent infection action must be prompt or the testicle will be quickly invaded and destroyed.

There must also not be too much deliberation concerning the subacute and chronic forms for fear that the process may be tuberculous and extension occur. The production of sterility on the affected side must not enter into the consideration. In all probability the vas is no longer patent, and the ultimate results are far too important to delay. Epididymectomy should be promptly performed and histologic examination be made of the removed tissue. Many sections should be examined, preferably the entire epididymis sectioned when there will be no chance of error.

When due consideration is given the import of whether there is any tuberculous process or not the seriousness of the appeal for more care in diagnosing and managing these unusual epididymal infections will be realized.