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GUMMATOUS EPIDIDYMITIS AND GUMMATOUS OSTEOPERIOSTITIS OF THE HUMERUS

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Though syphilis may attack any part of the human body there are, as is well known, certain regions that are relatively less often affected than others. Among these relatively immune regions is the epididymis. On account of its comparative rarity and because of certain difficulties in diagnosis, we have thought it worth while to put on record a case of luetic epididymitis that recently came under our observation.

CASE REPORT

The patient, a business man, 61 years of age, applied to one of us for a general diagnostic study in December, 1918. He complained of pain and swelling in the right upper arm and of a non-painful swelling within the right half of the scrotum.

ANAMNESIS

The family history was negative except for a neuropathic tendency in one sister. The patient's general health had been good, though he stated that he had several attacks of gonorrhea in youth and in early adult life, and that ten years previously he had suffered from a peculiar attack, during which his joints were tender, there

were sores on his tongue and hands—symptoms which his physician stated were due to "auto-intoxication." He gave no history of having had syphilis, though he admitted that there had been a suspicious sore on the glans penis about five years previously. The sore soon healed; there were no cutaneous manifestations, nor any lesions in the mouth or throat.

The patient had used tobacco constantly for many years and also had been a periodical drinker. He was a married man and had had two children. His wife and one of the children were living and both were said to be healthy.

In January, 1918, the patient went on a "spree," during which he contracted gonorrhea again; a month later he began to have pain in the left arm. The physician whom he consulted at the time made a diagnosis of neuritis. A few weeks after this a swelling occurred in the region of the right testicle. The patient stated that this was as large as a billiard ball. There was, however, but little spontaneous pain in this swelling, and it was not tender on pressure. At about the same time a lump appeared on the lateral surface of the left upper arm and he began to suffer severe pain in this region. There was also pain in the right shoulder and some swelling of the calf of the right leg. The latter swelling soon disappeared, but the lump in the left arm and the swelling in the scrotum remained unchanged. The pain in the left arm became gradually more intense, and for several months before coming to Baltimore the patient had taken from forty to sixty grains of aspirin per day to relieve the pain. His general condition had rapidly deteriorated. He had become very nervous, slept poorly, lost his appetite, had occasional nausea and suffered from constipation. He stated that he had lost some sixty pounds in weight during the previous few months. Seeking relief he had applied for treatment at various springs and sanatoria, where the condition was diagnosed sometimes as neuritis, sometimes as rheumatism. He stated that he had received no benefit from treatment, but on the contrary had gradually grown worse.

PHYSICAL EXAMINATION

The patient, though he had lost much flesh, was still some fifteen pounds above his calculated ideal weight. He looked ill and depressed. Well marked signs of a general arteriosclerosis (thickened radials, double arcus senilis, somewhat hypertrophied left ventricle and moderate diffuse dilatation of the aorta) were present, though the blood pressure was not increased (systolic, 126; diastolic, 80). The lips were a little cyanotic and there was a moderate grade of pulmonary emphysema. All the teeth had been extracted in the hope of getting rid of "rheumatism." The retrocervical lymph nodes were palpable on both sides, but there was no other lymph node enlargement. The abdomen was negative on physical examination, except for slight tenderness in the gall-bladder area.

On the lateral surface of the left upper arm, at the junction of the upper with the middle-third, there was a firm swelling, which was moderately tender on pressure.

In the scrotum there was a large, irregularly-shaped, firm, nodular mass, not tender on palpation.

This mass seemed to involve chiefly the epididymis on the right side. Definite involvement of either testicle could not be made out. Reflexes were all normal, except for sluggishness of the superficial abdominals. Physical examination was otherwise negative.

LABORATORY TESTS

Blood: R. B. C., 5,392,000; W. B. C., 8,800; Hb., 91 %. Microscopically negative.

Stomach Contents: Free HCl., 23 ac. %; Comb. acid, 16 ac. %. Total acidity, 39 ac. %. Guaiac, faintly positive. Microscopically a few R. B. C. Lactic acid, negative.

Stool: Soft, semiformed, lead-colored (specimen obtained by enema). Microscopically negative.

Wassermann reaction of the blood serum: 12-19-18, positive; 12-23-18, positive; 12-28-18, positive (patient slightly anticomplementary); 1-2-19, positive; 1-13-19, positive.

Cerebrospinal Fluid: Cells 2. Globulin positive with Ross-Jones and Pandy tests. Wassermann negative in single, double and quadruple quantities. Negative gold-sol. curve.

Urine: Acid reaction. Specific gravity, 1013-1018; sugar, 0; albumin, 0. Microscopically a few W. B. C. and epithelial cells.

Phthalein: Total, 56 % in two hours.

X-RAY REPORTS

Left Humerus: There is a slight bony defect at about the junction of the upper and middle-thirds. There is a suggestion also of some periosteal thickening.

Left Shoulder: Negative.

Thoracic Spine: Definite lipping of the vertebral bodies, but perhaps no more than one would expect at the patient's age.

Paranasal Sinuses: There is deviation of the nasal septum and some clouding of both antra, but no signs of recent infection.

Cervical Spine: There is a very little sharpening of the bodies of the cervical vertebrae, perhaps not more than one would expect at his age.

Sella Turcica: Cup-shaped, approaching the closed-in type; normal in size.

Teleroentgenogram: M. R., 3.8 cm.; M. L., 9.9 cm. Transverse position of the heart.

Gastrointestinal Tract After Barium Meal: The findings suggest a mild upper right quadrant lesion. The appendix is filled with barium and lies free.

EXAMINATIONS BY SPECIALISTS

Neurological Report: There is no evidence of involvement of any of the nerves, nor are there any signs of organic disease of the central nervous system. Condition in the arm suggests some local trouble, possibly luetic.

Psychiatric Report: Slight memory defect in a man subject to recurrent alcoholism, the alcoholism masking attacks of a mild recurrent depression (manic-depressive psychosis). Slight hypomanic periods have occurred.

Urological Report: The present condition of

the epididymis suggests very strongly the possibility of an existing tuberculous process. The slow onset of the trouble, together with lack of sensitiveness, is also in favor of tuberculosis. An epididymectomy is advised, since this would leave the testicle undisturbed and would entirely remove the inflammatory process.

DIAGNOSIS

It was important, of course, to arrive at a decision regarding the nature of the mass in the right epididymis. The urological specialist (see above) had felt sure that the case was one of tuberculous epididymitis and advised epididymectomy. On account of the irregular nodular condition in the epididymis, neoplasm had also to be considered. Because, however, of the painful swelling on the right humerus and of the positive Wassermann reaction in the blood, it seemed probable to us that the three conditions—mass in left arm, swollen epididymis, positive Wassermann—could be brought together under one rubric. We made, therefore, a tentative diagnosis of tertiary lues with gummatous osteoperiostitis of the right humerus and gummatous epididymitis, occurring in an atherosclerotic man who suffered from cyclothymia and dipsomania.

THERAPY

Arsphenamin was administered in weekly doses of 0.6 gram for five weeks. The pain in the arm, which had been excruciating, disappeared completely twenty-four hours after the first dose was administered and the swelling of the arm gradually grew less, disappearing entirely at the end of six weeks. The swelling of the epididymis also underwent rapid reduction, the epididymis becoming practically normal in size and consistency after a few weeks.

The therapeutic results in this case show the importance (1) of a general diagnostic survey of the body of the patient as a whole, and (2) the advisability of trying thorough antiluetic treatment before operating upon a testicle or epididymis suspected of being either tuberculous or neoplastic in nature.

The patient was placed on a dietetic-hygienic regime and was instructed to report regularly to his home physician and to us at least once in three months for a year. Antiluetic therapy is to be kept up for some time.

HISTORICAL NOTE

Syphilitic epididymitis was described as early as 1863 by Dron, who reported sixteen instances, and Fournier in 1869 recorded eight additional cases. The topic was monographically treated by Micheel in 1906. One of the best known English papers on the subject is that of Arthur Cooper (1885). In this country, reports on syphilitic epididymitis have been made by J. D. Thomas, E. L. Keyes, Jr., F. R. Wright, R. W. Taylor, G. W. Davis, and A. T. Michelson.

Syphilitic epididymitis occurs occasionally in the secondary stage of syphilis, appearing sometimes as early as within two or three months after the primary lesion. In Dron's series of cases the average time of appearance was three and a half months after the initial lesion, and in six of Fournier's cases the epididymis was attacked within seven months after the chancre appeared. The inflammation in secondary lues may affect the epididymis on one side only or on both sides simultaneously, the enlargement beginning nearly always in the globus major and being often restricted to this part of the epididymis.

When the epididymis is involved in tertiary syphilis there is gummatous inflammation, usually of one epididymis alone, but sometimes of both. Occasionally the gummatous inflammation starts in the testis and extends into the epididymis. In a few cases, as in ours, there are also gummata in the vas deferens or spermatic cord.

Even in hereditary lues gumma of the epididymis has been observed (Comby; R. W. Taylor).

In Michelson's paper, three types of syphilitic epididymitis are described: (1) acute diffuse interstitial epididymitis; (2) chronic diffuse interstitial epididymitis; and (3) gummatous epididymitis. This author emphasizes the firmness and painlessness of the masses in the gummatous type and states that the gummata rarely break down to the extent of rupturing externally.

CONCLUSIONS

1. Syphilitic epididymitis, 'though a rare condition, may be met with in either hereditary or acquired lues, and in either the secondary or the tertiary stage of the disease.

2. The globus major is most often involved, the lesion appearing as a firm nodular mass, which forms a cap for the end of the testicle, the latter resting, as it were, in a clam-shell. The French describe the epididymis appearing as a "helmet crest" for the testis.

3. The absence of pain is a characteristic feature.

4. The epididymis and the testis have

several times been unnecessarily removed in syphilitic epididymitis because of a wrong diagnosis, the condition having been mistaken either for tuberculosis or for neoplasm.

5. The importance of a general diagnostic survey for the purpose of differentiating between the different forms of enlargement of the epididymis and testis is obvious.

6. Gummatous epididymitis clears up quickly under intensive antiluetic treatment.

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INFANT FEEDING*

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It is manifestly impossible to discuss thoroughly this important subject in the few minutes so unexpectedly allotted to me. No topic in pediatrics has received so much attention, nor is there one upon which so many different opinions are more confidently expressed than upon the "proper" method of feeding infants. I

*Remarks in Section on Pediatrics, Southern Medical Association, Thirteenth Annual Meeting, Asheville, N. C., Nov. 10-13, 1919.

In the absence of Dr. Isaac A. Abt, of Chicago, Ill., who was to have read a paper on this subject, Dr. J. H. M. Knox, Jr., of Baltimore, Md., was asked to introduce the subject of Infant Feeding for discussion.