

ACCESSORY SPLENIC TISSUE WITHIN THE SCROTUM
REPORT OF A CASE *

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Accessory splenic tissue is no medical novelty. In fact, it is found so commonly in the course of routine autopsies that Lubarsch¹ stated that accessory spleens should be included in the normal anatomy of the adult. The reported incidence of accessory spleens at necropsy varies from 11 per cent² to 35 per cent.³ The variation apparently depends upon the zeal of the particular investigator and the care with which his search is conducted.

The accessory splenic bodies vary markedly in size and may, at times, be quite numerous. Almost invariably they lie in close proximity to the spleen, being located in the hilum or in one of the surrounding ligaments. More rarely they are associated with one of the neighboring organs, such as pancreas or liver.⁴

Accessory splenic tissue within the scrotum, however, is a distinct oddity. Such an occurrence was first reported in 1913 by Sneath,⁵ who described a splenic appendage attached to the upper pole of the left testis of a Negro, 45 years of age. This bulbous appendage was attached to the spleen by a narrow band which passed through the inguinal canal after traversing the peritoneal cavity and joining the spermatic cord. More recently (May, 1943) Emmett and Dreyfuss⁶ described a somewhat similar case in which accessory splenic tissue was found within the scrotum of a white man, 47 years old. With their case report these authors included an excellent summary of the meager literature on the subject.

REPORT OF CASE

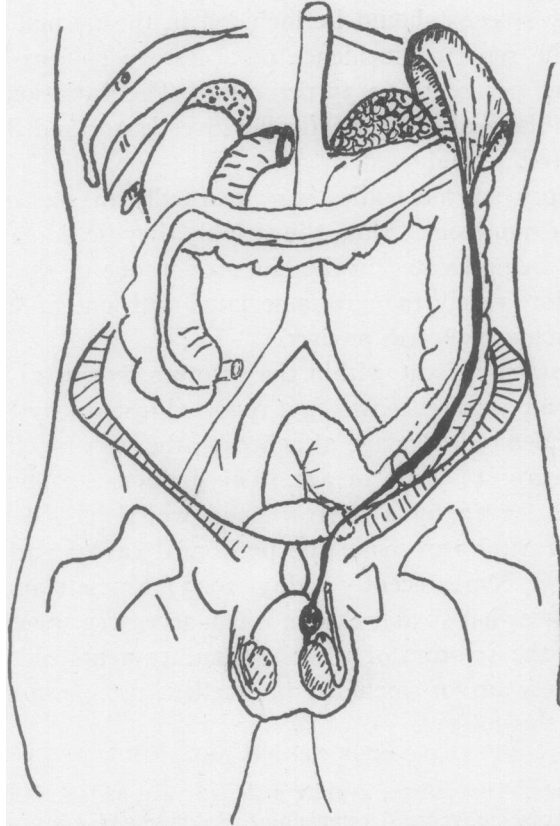
Clinical History. The patient, a white male, 56 years old, was admitted to the Lynn Hospital (case no. 110726) complaining of diffuse abdominal pain and hematemesis. A clear-cut history as to onset and progression of the symptoms was not obtainable as the patient was semicomatose and had been on an extended alcoholic bout. Physical examination revealed a moribund man, with a tender and spastic abdomen. The lungs were clear. A firm, nontender mass was felt within the scrotum, apparently attached to the upper pole of the testis. Temperature was 102° F., and the pulse rate was 140 per minute. On several occasions during the period of hospitalization the patient vomited a coffee-ground fluid.

In spite of therapy the patient died on the second hospital day, with a diagnosis of probable bleeding and ruptured peptic ulcer, or gastric carcinoma, with generalized peritonitis.

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Autopsy Findings

At autopsy (Lynn Hospital autopsy no. A-43-52) an acute, bleeding, duodenal ulcer was found. The ulcer had perforated and had resulted in a generalized fibrinopurulent peritonitis. All of the thoracic and abdominal organs were normally formed with the exception of the spleen, and all showed the effects of the severe infection and associated toxemia.



Text-Fig. 1. Diagram showing the relationship of the spleen and its appendage to the abdominal viscera.

The spleen (weight, 200 gm.) was slightly enlarged. It occupied its regular position in the abdominal cavity but was misshapen. Arising from the anterior aspect was a tapering tail of splenic tissue which continued down along the left lateral wall of the abdomen as a firm cord. This cord was encased in a fibrous capsule and contained a core of brownish splenic tissue. It varied in diameter from 0.3 to 0.5 cm. At the left internal inguinal ring it joined the spermatic cord, passed through the inguinal canal and terminated in the form of a bulbous tumor-like mass measuring 1.8 by 1.0 by 1.0 cm. (Text-Fig. 1). This

lay close to the head of the epididymis and was attached to the tunica albuginea by a broad base (Fig. 1). As it was completely covered by tunica vaginalis, it was not visible until the sac was opened. The cut surface of this bulbous mass resembled normal splenic tissue, being composed of a reddish brown parenchyma surrounded by a dense fibrous capsule (Fig. 2).

A small accessory spleen, 0.8 cm. in diameter, was found within the abdomen close to the hilus of the spleen.

Microscopic Examination

Examination of the tissue mass which lay close to the head of the epididymis showed the typical histologic configuration of a spleen with a fibrous capsule, trabeculae, sinusoids and pulp (Fig. 3). There was a moderate inflammatory hyperplasia of the pulp, a reaction seen also in the abdominal spleen.

DISCUSSION

In the first reported case of a scrotal spleen, Sneath⁵ described, more truly, a splenic appendage which lay within the tunica vaginalis testis. In this respect it resembled the case herein reported. Since then other reports have described bands between the spleen and the genital organs, some of these bands consisting of typical splenic tissue.^{7,8} That such bands are not always present, however, was shown by Emmett and Dreyfuss.⁶ They reviewed 4 cases and added another of their own in which the scrotal spleen was in no way connected with the abdominal organ.

The appearance of this splenic tissue in so distant a place as the scrotum is readily explained on the basis of the close embryologic relationship which exists between the spleen and the urogenital organs. This has been well described and illustrated in previous reports.^{5,6} Both the spleen and the testis make their appearance at about the fifth week of fetal life. The spleen appears as a thickening of the layers of splanchnic mesothelium of the dorsal mesentery of the stomach. The testis, arising as an indifferent sex gland from the medial surface of the Wolffian body, comes to lie in front of the primitive kidney on the posterior wall of the abdomen. The two organs are thus brought into close apposition, and fusion of the two is not inconceivable. Under such circumstances the testis, in its descent during the latter weeks of intrauterine life, might readily drag along a tail of developing splenic tissue.

Although accessory spleens usually arouse no great medical curiosity, they may offer an interesting clinical problem. They have been known to produce symptoms by torsion of the pedicle, by causing

intestinal obstruction,⁹ or by preventing proper response to splenectomy in such conditions as thrombocytopenic purpura³ or hemolytic anemia. Accessory spleens may participate in all pathologic processes to which the spleen is heir. Inflammation or hyperplasia in scrotal splenic tissue can produce intense discomfort or pain in this region.⁹ Similarly, as a palpable but unexplained mass in the scrotum, it could present a difficult diagnostic problem.

Thus the presence of accessory splenic tissue within the scrotum is not only of academic interest to the embryologist and pathologist, but is also of some importance to the patient and physician as well.

SUMMARY

A case is reported of accessory splenic tissue within the scrotum. Very few similar cases have been reported previously.

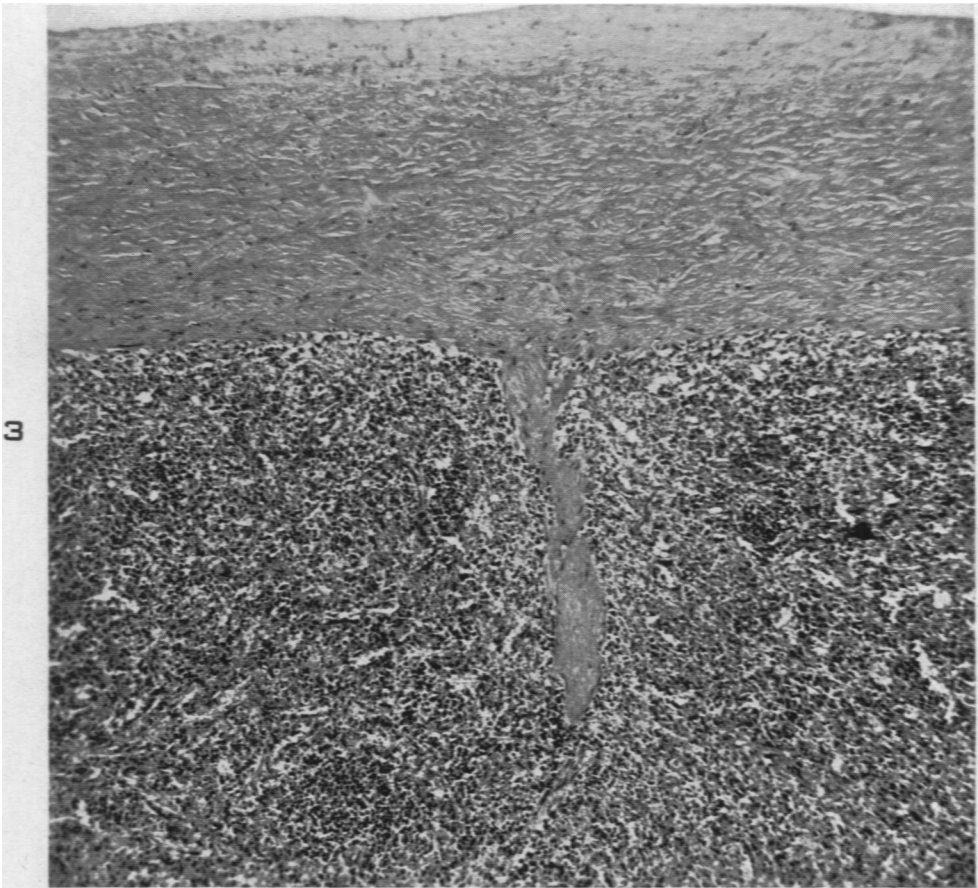
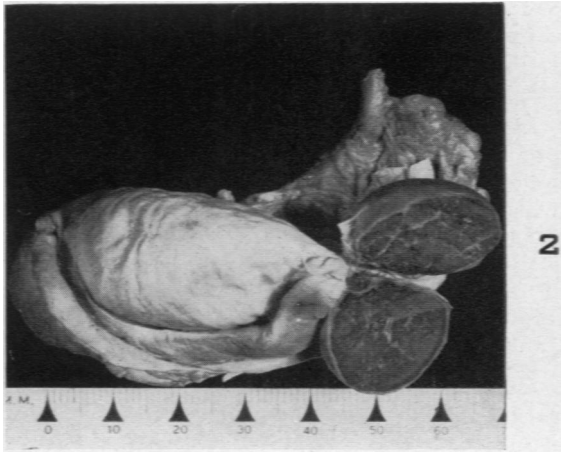
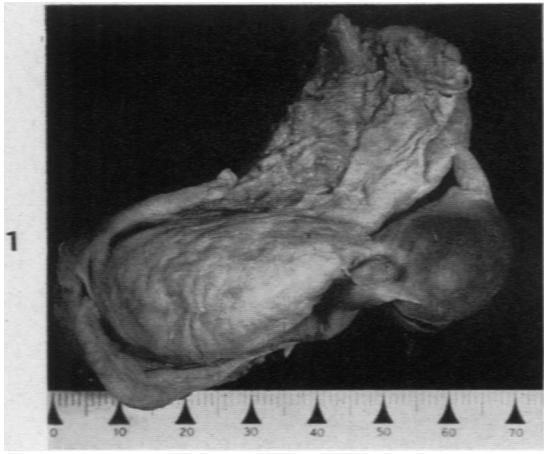
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DESCRIPTION OF PLATE

PLATE 15

- FIG. 1. The tumor is seen adjacent to the head of the epididymis. The fibrous cord at the upper pole of the tumor eventually joins the spermatic cord.
- FIG. 2. A cross section of the tumor shows a typical splenic structure with a fibrous capsule, trabeculae and splenic pulp.
- FIG. 3. Section of the scrotal tumor showing characteristic splenic histology, with trabeculae, follicles, pulp and a thickened capsule. Hematoxylin and eosin stain. $\times 95$.



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