



Accessory Spleen in the Scrotum- A Rare Case Report

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Abstract

An Accessory spleen (supernumerary spleen, splenule or splenungulus) is a small nodule of splenic tissue found apart from the main body of the spleen. Accessory spleen in scrotum is an extremely rare condition. We describe an unusual case of left scrotal swelling by accessory spleen in a 10 years old boy. The patient underwent a laprotomy with excision of accessory spleen. Accessory spleen should be considered in the differential diagnosis of scrotal swelling. Here we are reporting about a rare case of accessory spleen in the scrotum.

Keyword: Accessory spleen, scrotal swelling, splenogonadal fusion

INTRODUCTION

Accessory spleens are found in approximately 10% of the population ⁽¹⁾. Accessory spleen may be found during embryonic development when some of the cells from developing spleen are deposited along the path from the mid line, where the spleen forms, over to its final location on the left side of the abdomen by the 9th-11th ribs. The most common location for accessory spleen are the hilum of the spleen and adjacent to tail of the pancreas. They may be found anywhere along the splenic vessels, in the gastrosplenic ligament, the splenorenal ligament, the wall of the stomach or intestines, the pancreatic tail, ⁽²⁾ the greater omentum, the mesentery or the gonads and their path of descent ⁽³⁾. The typical size approximately 1cm, but size ranging from few millimeter up to 2-3cm are not uncommon. ⁽⁴⁾.

Splenogonadal fusion can result in one or more A.S. along a path from the abdomen in to the

pelvis or scrotum. The developing spleen forms near the urogenital ridge from which gonads develop. The gonads may pick up some tissue from the spleen, and as they descend through the abdomen during development, they can produce either a continuous or a broken line of deposited splenic tissue ⁽³⁾.

CASE REPORT

A 10 years old boy came to surgical OPD with complaint of left scrotal swelling since birth which gradually increase in size. Child mother gives history that swelling size increase during crying and laughing in initial stage for that he has history of left side herniotomy 9 years back at periphery hospital. But swelling is persist after that and gradually increase in size and not associated with pain, fever or vomiting. No alteration of size during walking, standing or lying down. No expansile impulse on cough, temperature over swelling is

normal, non reducible, non tender, firm in consistency, smooth.

USG abdomen show normal and left scrotum show testicular mass. After all routine investigation and pre anaesthetic checkup, through left inguinal approach after exploration there are found some other cord like structure other than spermatic cord after trace this reach in to scrotum and attached to a 4*3cm size reddish, firm, near testis, testis small in size, A incision biopsy taken from swelling and send for HPE in laboratory.

After HPE report which say that this is splenic tissue and proper workup with CECT whole abdomen which report say *A 2.4*2.2 CM SIZED SPLENIC TISSUE IS SEEN IN LEFT SCROTAL SAC WHICH IS CONNECTED TO THE INFERIOR POLE OF THE NORMAL INTRA ABDOMINAL SPLEEN VIA A CORD LIKE SPLEENIC TISSUE(DIAMETER 11mm) TRAVERSING THROUGH THE LEFT INGUINAL CANAL AND LEFT ABDOMINOPELVIC REGION.LEFT SCROTAL SAC ALSO SHOWS MILD FLUID. LEFT TESTICAL IS NOT IDENTIFIED SEPARATELY.*

Patient reoperate after one month after taking proper consent under general anaesthesia after all aseptic precaution two incision one upper right paramedian through this approach we found a cord like structure reddish in colour is connected to lower pole of spleen and it reached in to left inguinal canal through intra peritoneal, other incision given on left inguinal region through this cord is dissected and separate from spermatic cord and the scrotal splenic tissue from testicular tissue, after this connecting cord is tied near the lower pole of spleen with PGA 1-0 and CUT. This splenic tissue with cord like structure is removed and send for HPE in laboratory and wound closed in layer. This is around 3*2cm size swelling reddish in colour; firm and connected to 11cm long cord like structure.



FIG:-1 Show main spleen connected to accessory spleen in in It scrotum through cord like structure also show testical tissue.

DISCUSSION

Accessory spleen is a small nodule of splenic tissue found apart from the main body of the spleen. It is found in approximately 10% of the population⁽¹⁾. They form either by the result of developmental anomalies or trauma⁽²⁾. The differentiation of the spleen begins in about the fourth to fifth week. It is completed in the twelfth week. During this time, the spleen is transformed from a trilobated into a single organ. It is situated between the mesonephric and the urogenital fold. The mesonephros reached its maximal cephalad extension at the time when the spleen begins to develop. The caudal migration of the genital gland begins in the 8th to 9th week. Therefore, we must place the teratogenetic period, during which portion of the spleen are transported downwards with the genital gland, between the fourth and tenth week; most probably in the sixth to 8th week (Putschar⁽⁵⁾) because during this time the splenic tissue is already well developed and is still in close contact with Wolffian body found in the y. splenic tissue then accompanies the genital gland

in its descensus and is finally found in the scrotum in close association with the upper pole of the left testicle and epididymis as in our case. The path of this migration is, in some cases, visibly demonstrated by a band of tissue as in my case also consisting of fibrous or splenic tissue which connects the normally located spleen with the accessory spleen in the scrotum or the broad ligament. Putschar⁽⁵⁾ has collected several cases with such bands between the spleen and genital organs. Since then another such case has been published by Fischer and Gissel⁽⁶⁾. In their report the patient was a 13-year-old boy who was operated upon for an undescended testis in the left inguinal canal. A flat, further upward, round band from the epididymis in to the left side of the abdominal cavity. It was followed for 30 cm. It was as thick as a knitting needle, smooth and dark red. The lowermost 8 cm, were removed and found to consist of splenic tissue. The literature contains, in addition, several reports of cases in which unlike in our own case- the scrotum was not connected with the spleen. Finally⁽⁷⁾ report a case of a male child with congenital left inguinal hernia. A dark brown and purple, round swelling at the head of the epididymis was removed. It was covered with peritoneum and consisted of splenic tissue. TALMANN⁽⁸⁾ a case of a 22-year-old male had a painful swelling in his left scrotum which consisted of splenic tissue. SETTLE⁽⁹⁾ report a case of an adult male patient who suffered from a painful enlargement of the left testis. An enlarged accessory spleen in the scrotum. Splenectomy of the accessory spleen is the method of choice.

CLINICAL SIGNIFICANCE

Accessory spleens are medically significant in that they may result in interpretation errors in diagnostic imaging⁽⁴⁾ or continued symptoms after therapeutic splenectomy.⁽¹⁾

SUMMARY

A case of a scrotal accessory spleen with a continuous free intraperitoneal cord connecting with the main spleen has been presented.

discussion of the historical, embryological and clinical aspects of such a condition have been considered with appropriate illustrations.

DISCLOSURE

There is no conflict of interest for this study.

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