

ACCESSORY SPLEEN

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ABSTRACT

Accessory spleen is a small nodule of splenic tissue found apart from main body of spleen. Other name for accessory spleen is supernumerary spleen, splenule or splenunculus. It is usually congenital failure of fusion of splenunculus found close to hilum of spleen, greater omentum, tail of pancreas. Accessory spleen is found approximately in 10% population.

MATERIALS AND METHODS

The present study 100 cadaveric spleens obtained from routine dissection, specimens present in Department of Anatomy, Andhra Medical College, Vishakhapatnam in 3 years span, out of which 25 are foetal spleens, 75 are adult spleens.

RESULTS

We got 4 accessory spleens in adult and 1 in foetal spleen.

CONCLUSION

The knowledge of accessory spleen is medically significant. That they may result in interpretation errors in diagnostic imaging and symptoms may be continued after splenectomy.

KEYWORDS

Accessory Spleen, Splenunculus, Hilum of Spleen, Splenectomy.

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INTRODUCTION: An accessory spleen may be formed during embryonic development when some of the cells from developing spleen are deposited along the path of spleen from midline where spleen forms over to final location on left side of abdomen by side of 9-11 ribs⁽¹⁾ typically around 1 centimetre formed either developed anomalies or trauma.⁽²⁾ Accessory spleens found in 10% of population more frequently in women are either development anomaly or trauma.⁽¹⁾ The common location for accessory spleen is hilum of spleen and adjacent to tail of pancreas. They may be present anywhere along splenic vessels, in gastrosplenic ligament, lienorenal ligament, the walls of stomach and intestine, pancreatic tail. Size of accessory spleen ranging from 1 cm to 3 cm.⁽³⁾

It may be present along greater omentum, mesentery, gonads, as the path of descent. Splenogonadal fusion can result in one or more accessory spleen's path from abdomen to pelvis or scrotum; the developing spleen in dorsal mesogastrium near urogenital ridge from which gonads develop. Gonads may pick up some tissue of spleen and they descend through abdomen during development, they

produce continuous broken line of deposited splenic tissue.⁽⁴⁾

Splenosis is a condition in which foci of splenic tissue undergo autotransplantation, following physical trauma or splenectomy. Displaced tissue fragments can implant on well vascularised surfaces on abdominal cavity, most of them followed by physical trauma or splenectomy.^(5,6)

Majority of accessory spleens are benign and do not usually require treatment; they may be mistaken for enlarged lymph nodes or neoplasms.

MATERIALS AND METHODS: Present study was done in 100 human cadaveric spleens, cadaveric spleens obtained from routine dissection and previous dissections in Andhra Medical College, Visakhapatnam. Out of which 75 are adult spleens, 25 are foetal spleens.

OBSERVATION: Out of 100 spleens, we found 4 accessory spleens near hilum of spleen in gastrosplenic ligament,⁽¹⁾ accessory spleen in foetus. Total incidence of accessory spleens in our study is 5%. We got 1 accessory spleen 2.5 cm in diameter near tail of pancreas in gastrosplenic ligament (Figure- 1). Remaining accessory spleens are 1 cm in diameter near hilum of spleen (Figure- 2). We observed one foetal spleen of 5 cm in gastrosplenic ligament (Figure- 3). They are confirmed by histological examination (Figure- 4).

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Fig. 1: Accessory Spleen near Tail of Pancreas



Fig. 2: Accessory Spleen near Hilum of Spleen

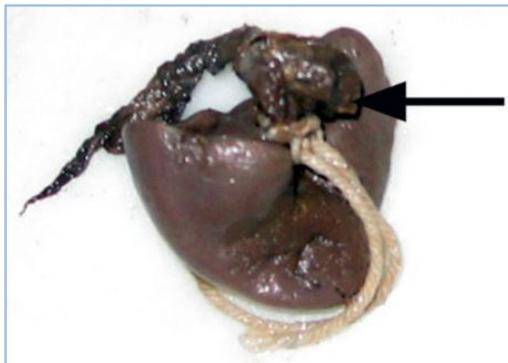


Fig. 3: Foetal Spleen Showing Accessory Spleen

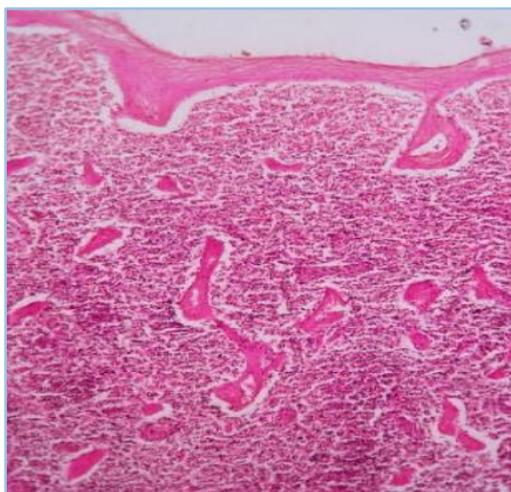


Fig. 4: Histology of Accessory Spleen (10X H & E)

DISCUSSION: Accessory spleen is one of developmental anomaly of spleen, other anomalies include complete agenesis, polysplenia, an isolated small additional accessory spleen, a persistent lobulation. The incidence of accessory spleen is 10-30% of all autopsies. Incidence of single accessory spleen in 85%,⁽²⁾ accessory spleens in 14%.⁽³⁾ accessory spleens in 1%.⁽⁷⁾ The position of accessory spleen varies. Common is splenic hilum (75%), pancreatic tail (20%). Remaining 5% includes greater curvature of stomach, mesentery of small and large intestine.

They occur in 10% of people about 1 cm in diameter. Accessory spleens are usually isolated but connected to spleen by thin bands of splenic tissue. Intrapancreatic accessory spleen reported by Nick, Jawaral et al.⁽⁸⁾ Splenic pseudotumour in accessory spleen reported by Toyotsugu et al in annals of nuclear medicine.⁽⁹⁾ Cutiz and moviz pinted in case of splenectomy for haemolytic icterus leukaemia accessory spleens must be removed along spleen for proper results. Wandering accessory spleen reported by A. Erden, G. Karaalp et.al. in ultrasound examination in a 60-year-old man.⁽¹⁰⁾ CT/MRI scintigraphy Tc-99 helpful in making diagnosis of accessory spleen. In our study, we observed 4 accessory spleens in adults and 1 accessory spleen in foetal cadaver. Total incidence was 5%.

CONCLUSION: Accessory spleens in majority of cases are symptomless. Accurate preoperative evaluation is necessary in case of splenectomy. Failure to remove accessory spleen results in failure of symptoms to resolve. During medical imaging; accessory spleen is confused with enlarged lymph node or neoplastic growth in pancreas, gastrointestinal tract and adrenals.

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