

Accessory spleen at hilum – A case report

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Abstract

Accessory spleens are congenital and incidental. They are formed as a result of failure of fusion of multiple buds of splenic tissue in the dorsal mesogastrium in the embryonic life. They can be misdiagnosed with pancreatic tumor or adenoma and can lead to recurrence of hematologic disorders even after splenectomy. The present case report is regarding the incidental finding of accessory spleen at the hilum during routine anatomical dissection. It was supplied by a separate branch from splenic artery and connected with the main splenic mass by a thin band of similar tissue.

Key Words: Accessory spleen, splenectomy, pancreatic tumor, hematologic disorders.

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CASE-REPORT

During routine anatomical dissection of abdomen in an adult male cadaver, we found an additional splenic mass near the hilum of spleen. This accessory spleen was connected with main splenic mass by a thin band of similar tissue. It was supplied by the branch of splenic artery and drained by a tributary from splenic vein. Main splenic mass was normal without any other variation. No other splenic tissue was found in gastrosplenic and lienorenal ligaments or in pancreatic tail.



Figure 1: Diagram showing accessory spleen

INTRODUCTION

Spleen is a lymphoid organ situated in the upper left quadrant of the abdominal cavity between the fundus of stomach and diaphragm.^[1] Spleen is mesodermal in origin. It begins to develop during fifth week of intrauterine life in the dorsal mesogastrium. Mesenchymal cells lying between the two layers of dorsal mesogastrium condense to form a number of small mesenchymal masses that later fuse to form a single mesenchymal mass.² Any failure of this fusion results in small splenic tissues developing separately and resulting in accessory spleens. These accessory spleens are usually isolated but can be connected to the spleen by thin bands of similar tissue.³ Though most common site for accessory spleen is the hilum of spleen, they can be found in gastrosplenic and lienorenal ligaments also in pancreatic tail along the splenic artery. We found accessory spleen during routine dissection near the hilum of spleen.

DISCUSSION

The incidence of accessory spleen, mentioned in the text book of Moore's Anatomy is 10%.⁴ In India, Chaware PN⁵ reported 4.5% of the splenic samples with accessory spleen while Mallikarjun⁶ in his cadaveric study found accessory spleen in 4 cadavers (8%) out of 50. In a study by Rayhan,⁷ the incidence of accessory spleen was 24.28% in Bangladeshi people while Romer T⁸ mentioned 10% of cases with accessory spleen in the study in Switzerland. Most accessory spleens are asymptomatic and incidental. They should not be confused with enlarged lymph nodes or masses in the adrenal gland or pancreas.^{9,10} Accessory spleens may result in interpretation errors in diagnostic imaging. In hematologic disorders, surgeons must be aware of accessory spleens so that they remove all functioning splenic tissue otherwise the hematologic disorders will recur.¹¹ Hemorrhage and spontaneous rupture can also occur as a result of venous congestion and torsion of an accessory spleen.^{12,13} When an intra-abdominal mass is identified in a post splenectomy patient, even after lymph nodes dissection associated with gastric cancer, accessory spleen must be acknowledged as a differential diagnosis.¹⁴

REFERENCES

1. Standring Susan. Gray's Anatomy, the Anatomical Basis of Clinical Practice, 39th Ed. Spain: Churchill Livingstone Elsevier. 2005; 68, 1221. check page number..
2. Vishram Singh. Clinical embryology, 1st Ed. New Delhi: Elsevier. 2012;165
3. Keith L. Moore, T. V. N. Persaud, Mark G. Torchia. The developing human, clinically oriented embryology, 9th Ed. Philadelphia: Saunders an imprint of Elsevier. 2013;226
4. Moore KL, Dally AF. Clinically oriented Anatomy. 7th ed. Philadelphia: Lippincott Williams and Wilkins; 2011: p. 167
5. Chaware PN, Belsare SM, Kulkarni YR, Pandit SV, Ughade JM. The Morphological Variations of the Human Spleen. Journal of Clinical and Diagnostic Research. 2012; 6(2): 159-62
6. Dr. Mallikarjun Adibatti, Dr. Asha K. Congenital Anomalies of Spleen - cadaveric study with special reference to Multilobulated spleen. Indian Journal of Clinical Anatomy and Physiology 2014;1:11-14
7. Rahyan KA, Nurunnabi ASM, Kishwara S, Noor M. Morphometric study of the postmortem human spleen. J Dhaka Med Coll. 2011; 20(1): 32-6.
8. Romer T, Wiesner W. The accessory spleen: prevalence and imaging findings in 1,735 consecutive patients examined by multidetector computed tomography. JBR-BTR. 2012; 95(2): 61-5.
9. Morteale KJ, Morteale B, Silverman SG. CT features of the accessory spleen. AJR Am J Roentgenol 2004;183:1653-1657
10. Muktyaz Hussein, Khalid Hassan, Birendra Yadav, Nema Usman Anatomical variations of spleen in north Indian population and its clinical significance. Innovative Journal of Medical and Health Science 3: 4 July – August. (2013) 190 - 192.
11. Bart JB and Appel MF: Recurrent hemolytic anemia secondary to accessory spleens. South Med J 1978; 71: 608- 609.
12. Padilla D, Ramia JM, Martin J, Pardo R, Cubo T, Hernandez-Calvo J. Acute abdomen due to spontaneous torsion of an accessory spleen. Am J Emerg Med 1999; 17:429-430
13. Hems TE, Bellringer JF. Torsion of an accessory spleen in an elderly patient. Postgrad Med J 1990;66:838-839
14. V. Durgesh, CH. Roja Rani V. Durgesh, CH. Roja Rani. Accessory spleen. IOSR Journal of Dental and Medical Sciences 2015;14:10-01-03

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