Multilobed Spleen Kundan1

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ABSTRACT

The spleen plays multiple supporting roles in the body. It is a vital organ for the functioning of immune system. It acts as a filter for blood as part of the immune system. Old red blood cells are recycled in the spleen, and platelets and white blood cells are stored there. It can have a wide range of congenital anomalies including its shape, location, number, and size. Although most of these anomalies are congenital, there are also acquired types. Multilobed spleen is one of such condition. It is most commonly detected during abdominal surgeries. Since they are bigger in size than the normal spleen, they are more pre disposed to trauma. In this case report we have presented such a case of multi lobed spleen, which was detected incidentally during exploratory laprotomy for blunt trauma abdomen with hemoperitoneum.

Key words: spleen, multilobed spleen, hemoperitoneum, congenital anomaly, spleenomegaly

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INTRODUCTION

There is a wide range of congenital anomalies of the spleen. Some are common, such as splenic lobulation and accessory spleen. Other less common conditions, such as Wandering spleen and polysplenia, have particular clinical significance. During the early phase of development, the spleen is represented by a few splenic nodules which eventually fuse to form the spleen. Some of these nodules may develop independently. This will lead to formation of accessory spleens. The embryological reason for having notches on the superior margin is the improper fusion of the splenic nodules along this margin during development. These multilobulated spleen are asymptomatic , but increases the risk for traumatic injuries as like cases of spleenomegaly

CASE REPORT

A 55 year old male was brought to surgical emergency, with the history of blunt trauma to left side of upper abdomen during a road traffic accident. The patient was in shock, which was managed and patient was investigated, usg showed hemoperitoneum.

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Emergency exploratory laprotomy was done, About 2 lts of blood and clots were evacuated from the abdominal cavity. There was a laceration of size 8 cm near the upper pole of spleen, with ruptured internal hematoma, for which spleenectomy was done. On inspecting the spleen, it was found to contain 3 extra lobules



(fig: 1) with notches at its lower pole with size of spleen being 18 cms.

DISCUSSION

The most common Congenital anomalies affecting the shape of spleen are lobulations, notches, and clefts [2]. The fusion and location anomalies of spleen are accessory spleen, spleno-pancreatic fusion, and wandering spleen; polysplenia can be associated with a syndrome [4]. Most of these anatomic variants have no clinical significance; they need, however, to be recognized by the radiologist as such [3]. Awareness of these variants is important for the radiologist to interpret the findings correctly and avoid mistaking them for a clinically significant abnormality.

Multilobed spleen is one of the anomalies of spleen, which is usually is either associated with heterotaxy syndrome or may be present as an isolated anomaly[1]. Due to its large size, it may mimic as spleenomegaly so awareness regarding this condition is necessary to exclude this condition, before diagnosing spleenomegaly. Parsons (1901) documented the number of spleenic notches ranging from 0 to 7, with 2 notches being common. Two cases of multilobed spleen have been reported with heterotaxy syndrome [4, 5].

CONCLUSION

In conclusion, present case report is important because, multilobed spleen may mimic as spleenomegaly so awareness regarding this condition is necessary to exclude this condition, before diagnosing spleenomegaly radiologically as well as an intraoperative finding to avoid unnecessary interventions.

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REFERENCES

- Hussein et. Al; 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
- 2. Adalet Elcin Yildiz, Macit Orhan Ariyurek, and Musturay Karcaaltincaba, "Splenic Anomalies of Shape, Size, and Location: Pictorial Essay," The Scientific World Journal, vol. 2013, Article ID 321810, 9 pages, 2013. doi:10.1155/2013/321810
- 3. Gayer G¹, Hertz M, Strauss S, Zissin R.; Semin Ultrasound CT MR. 2006 Oct;27(5):358-69.Congenital anomalies of the spleen.
- 4. Santosh K. Mahalik, Sanat Khanna, and Prema Menon ; Malrotation and volvulus associated with heterotaxy syndrome ; J Indian Assoc Pediatr Surg. 2012 Jul-Sep; 17(3): 138–140.
- 5. Merve Erol Gulseven, Emel Bostan, Perihan Ozkan Gumuskaya, Gulali Aktas, Suzan Deniz Onol, Gözde Konuk, Haluk Şavlı, Mehmet Küçük; A rare case of heterotaxy syndrome with agenesis of the head and uncinate process of the pancreas; Biomedical research : volume 27