

Clinical Study of Splenic Disorder by ultrasonography

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Abstract- The most common use of sonography in imaging the spleen is to detect its enlargement. In past, when articulated arm B scanning was in wide use. The rule of thumb was that if the spleen was visualised anterior to the aorta, it was pathologically enlarged. Today, with real time scanning the determination of splenomegaly has become basically a subjective judgement. The more experience the sonographer and interpreting physician have, the more accurate their judgement. Ultrasound can help assess splenic masses, primary splenic masses are quite rare. Ultrasound is also useful in assessing splenic damage from blunt trauma, such as rupture or haemorrhage. In this study we have assess splenic disease by Ultrasonography.

Introduction :- Spleen is a lymphatic organ connected to the blood vascular system. It acts as a filter for blood & play an important role in the immune response of the body. The spleen is a wedge-shaped organ lying mainly in the left hypochondrium & partly in the epigastrium. Accessory spleen is found in upto 10% of the general population radiological & imaging examination provides wide range of diagnosis of disease of spleen. Although there are various radiological techniques available like X-ray, CT, ultrasonography, MRI. But among, these all ultrasonography is most commonly used imaging technique for diagnosis of disease of spleen USG is very useful for the diagnosis of splenomegaly, splenic cyst, splenic abscess, congenital anomalies accessory spleen, hydatid cyst etc in routine practice of diagnostic radiology. Frequently we come across the disease related to spleen because of the prevalence of these disease in the society & easy availability of patient, this particularly study was selected.

AIM : To asses the type of splenic disease through ultrasonography.

Material & Methods :-

For the conduction of this study we used ultrasonography machine along with this machine we used patient couch & USG gelly.

Position and preparation of the patient : The patient should be supine initially & later on right side. Apply coupling agent liberally over the left lower chest, the upper abdomen & left flank. The patient should take a deep breath & hold it in when a specific area is being scan.

Scanning technique :- Scan with the patient in the supine & oblique position multiple scan may be necessary. Scan from below the costal margin, angling the beam towards the diaphragm then in the ninth intercostals space downward. Repeat through all lower intercostal space, first with the patient supine & then with the patients lying oblique (30 degree) on the right side.

Observation & Result :-**1. Distribution of study group depending upon present complain**

Present complain	No. of Patient			Percentage
	M	F	Child	
Asymptomatic	18	12	1	10
Fever with rigor	18	12	4	34
Abdominal discomfort	5	5	2	12
Dyspepsia	2	2	1	5
Childhood cirrhosis between age of 1 to 3yr.	0	0	3	3
Palpable splenomegaly in hypochondriac region	10	8	8	26
Previously diagnosed case of splenomegaly	5	4	1	10
Total	44	36	20	100

2. Classification of study group depending upon nature of disease

Nature of disease	No. of Patients	Percentage
Splenomegaly	52	52
Accessory spleen	06	06
Splenic cyst	20	20
Splenic abscess	09	09
Splenic nodules	02	02
Infarct	02	02
Splenic Trauma	09	09

Among 100 patient who were scanned a major group of around 52% were diagnosed to have splenomegaly & the second largest group were 20% who were diagnosed as splenic cysts. 9% patients were diagnosed as splenic abscess & splenic trauma, accessory spleen cases were 6% whereas splenic nodules & infarct were 2% each.

Discussion & Conclusion :-

Among all radiological & imaging investigations for spleen disorder, ultrasonography remain, the golden standard investigation because of its easy availability, cheaper investigation cost & rate of high accuracy.

Majority of the patient visiting our section of Radiology for this study were fever with rigor 34% only small group of patient come with asymptomatic & complain like a dyspepsia, Abdominal discomfort. In this study it is noticed that among splenic disorders. such as fever, with rigor 34% & palpable splenomegaly at left hypochondriac region 26% where as malignancy & other disorders are not commonly detected in our section.

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