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RESEARCH ARTICLE

DIFFUSE HEMANGIOMATOSIS OF THE SPLEEN - CASE REPORT

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Abstract

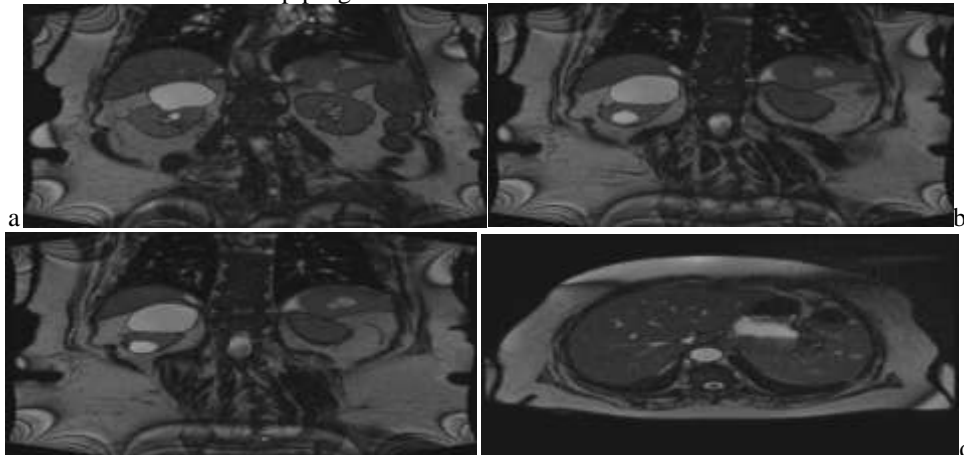
Diffuse spleen hemangiomas is a rare benign vascular condition that is often seen in systemic angiomas (associations with Turner, Beckwith-Wiedeman and Klippel Trenaunay syndromes) and very rarely unique splenic localization [1,4]. They often present a latent clinical picture of incidental discovery sometimes may be accompanied by severe hypersplenism and other complications, splenic hemangiomas exhibit imaging characteristics similar to hepatic hemangiomas.

We present the case of a diffuse hemangiomas discovered accidentally in an asymptomatic patient.

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Introduction:-

We report the case of a splenic hemangiomas accidentally discovered in a 70-year-old patient, who presents with colic-like liver pain with a discreetly high cholestasis balance, the ultrasound performed in this patient objectivated a gallbladder difficult to visualize with discrete dilatation of the main bile duct, a Bili-MRI is done as part of the etiological assessment, the MRI returned in favour of a scleroatrophic gallbladder with the presence of a migrating stone in the main bile duct, spleen site of multiple lesions of different size with an intense hypo signal in T1SE and hyper intense in T2 SE and which rise after intravenous injection of Gadolinium Chelate at the periphery to arterial time with centrip progression.



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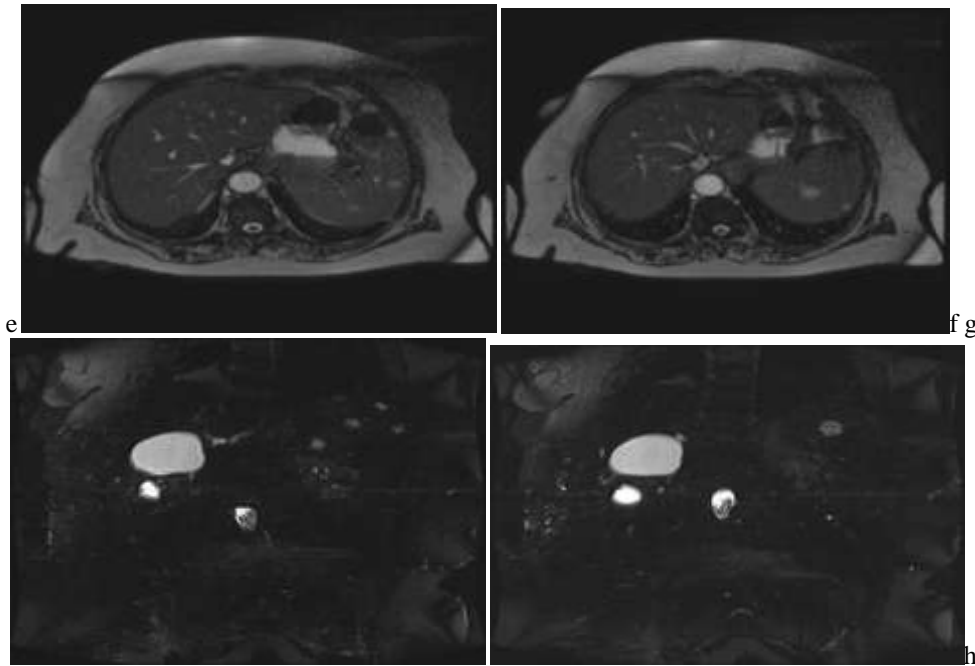


Figure 1:-T2SE(a,bet c) and T2 haste (g and h) coronal MRI slices, T2 SE(d,e and f) axial T2-weighted splenic lesions, of different sizes, other liver-related lesions.

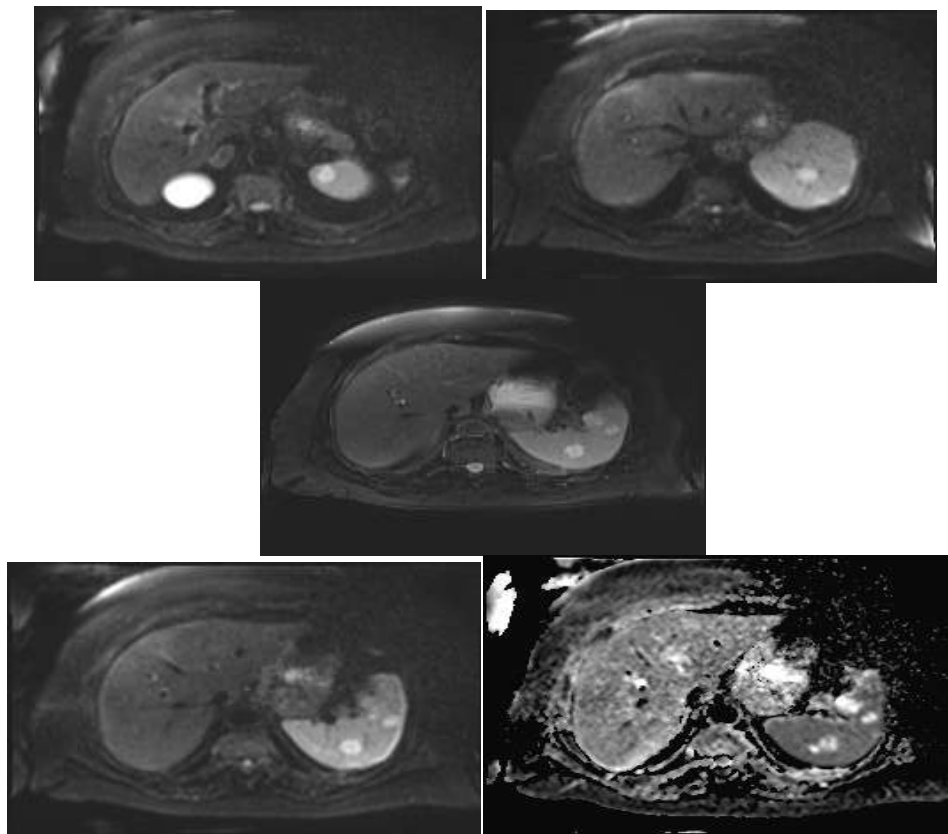
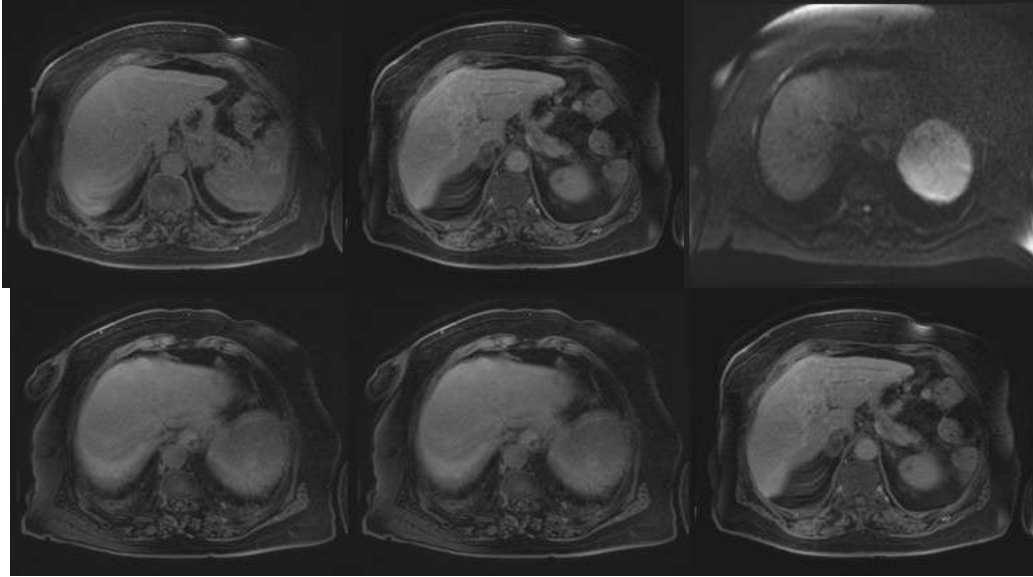


Figure 2:- MRI in axial slices in Diffusion sequence and ADC show multiple spleen lesions in hypersignal diffusion without ADC drop.



Figures 3: - MRI in T1FatSat sequences with dynamic injection of contrast agent Gadolinium chelate show a centripetal enhancement of the lesions described above and which are homogeneous in late time: aspects compatible with splenic hemangiomas of fortuitous discovery.

Discussion:-

Splenic hemangioma is the most common benign solid tumour of the spleen, considered the second most common focal lesion after simple splenic cyst [1,4 and 5]. Their prevalence rate at autopsy is estimated at about 0.1-14%. Most hemangiomas discovered in adults, the average age is 63 years (23-94 years) with a male predominance (1.4/1.0). Splenic hemangiomas ranged in size from 0.3 to 7 cm maximum diameter with a risk of spontaneous rupture, in large hemangioma causing intra-abdominal hemorrhage.

They are asymptomatic in 80% of accidental cases and discoveries. Sometimes they may be associated with splenomegaly (12.5%), abdominal pain, dyspnea, diarrhea or constipation.

On the anatomopathological level, splenic hemangiomas consist of non-encapsulated non-neoplastic vascular ducts of different sizes ranging from capillary to cavernous, containing slow-flowing blood, which explains the contrast-taking kinetics either in MRI or CT after intravenous contrast injection.

Differential diagnosis of diffuse splenic hemangiomas should take into account other vascular tumours or tumour type lesions of the spleen such as lymphangioma, littoral cell angioma, hemangioendothelioma and primary angiosarcoma, the peliosis of the spleen and the hamartoma. [1,4,5] hence the interest of imaging to avoid unnecessary surgery and for monitoring.

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The ultrasound aspects of hemangiomas vary depending on their histological composition (hypo, iso or hyperechogenic) often they are round echogenic masses, with or without cystic areas. If typical aspect of a small hyperechogenic nodule without particular context the diagnosis can be made requiring no other means of imaging.

In CT without iodine contrast injection lesions are usually homogeneous, hypo dense or multi cystic, they may contain calcifications. After contrast, the vascular channels show centripetal filling towards the center of the lesion.

However, larger hemangiomas are often heterogeneous with areas of hemorrhage, filling more slowly and incompletely and inhomogeneously, a discontinuous or non-consecutive peripheral enhancement after intravenous contrast injection at arterial time.

The appearance of magnetic resonance imaging of splenic hemangiomas is similar to that of hepatic hemangiomas, they have an iso or hypo-intense signal T1 SE and hyper-intense in T2 SE compared to normal splenic parenchyma. Dynamic MRI after chelate administration of Gadolinium showed that splenic hemangiomas have three enhancement curves, the first type is characterized by an immediate homogeneous enhancement that persists, the second early peripheral enhancement with homogeneous delayed enhancement, and the last characterized by peripheral contrast with centripetal progression and persistence of a central fibrous scar.

However, larger hemangiomas may have a variable MRI signal due to complication characteristics such as hemorrhage [6, 7 and 8]

Conclusion:-

Splenic hemangiomatosis is a rare, asymptomatic entity. MRI is a means of imaging that alone allows to carry a precise etiological orientation on nodular splenic lesions of accidental discovery.

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