Gamna Gandy Bodies: The Tobacco Flex appearance

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Clinical Image

Splenic siderotic nodules, also known as Gamna Gandi’s bodies are nodules containing hemosiderin, fibrous tissue and calcium and result of small necrotic haemorrhagic foci in the spleen with a fibroblastic reaction leading to microarchitectural distortion.

Anatomopathological examination show bamboo-shaped small circumscribed nodular siderotic deposits corresponding to fibrous collagenous tissue, impregnated with iron pigments (hemosiderin) and calcium.

Herein, we display images of Gamna Gandi’s bodies in a 55-year-old patient with a history of chronic portal thrombosis resulting in portal hypertension. Gamna Gandi’s bodies are easily detected, in most cases on the various cross-sectional imaging techniques as a well-circumscribed millimeteric nodules, with a black central hemorrhage surrounded by a double rim, a pale inner hyperemic rim and a dark outer rim, giving an appearance of “tobacco flecks” (figure 2, D, arrow).

They typically appear as multiple diffuse parenchymal hyper echoic spots on ultrasound, mostly without any posterior enhancement. In CT scan, they are barely visibly due to the low calcic component of these bodies not distinguishable from splenic granulomas (figure 1). MRI remain the most sensitive imaging modality, demonstrating punctate foci, hypo intense in all sequences due to the remarkable magnetic susceptibility effect of hemosiderin more particularly in susceptibility weighting imaging (SWI) (Figure 2)

They are essentially observed in portal hypertension but remain no specific of this pathology.

Figure 1: ultrasonic image of the spleen showing multiple hyperechoic spots with and without posterior acoustic enhancement (A) and axial CT scan image showing fewer hyperdense spots.

Figure 2: MRI showing hypo intense splenic spots in all sequences, T2 axial (A) and coronal (B) images, without restriction in diffusion (C) nor enhancement after administration of gadolinium in different injection phases (D, red arrow), found in a 55-year-old woman with chronic portal thrombosis (D, yellow arrow).