

The central dot sign of epiploic appendagitis

Hamed Nejadhamzeeigilani ¹

¹Leeds & West Yorkshire Radiology Academy, Leeds Teaching Hospitals NHS Trust, Leeds, UK

Epiploic appendagitis is the acute inflammation and infarction of epiploic appendages, commonly secondary to torsion. It is a great mimicker as its clinical manifestation may be similar to appendicitis, diverticulitis, or colitis. Focal abdominal pain, tenderness, and mild pyrexia are clinical features of the condition [1]. Epiploic appendages are pedunculated adipose structures which extend from the serosal surface of the colon, along the free taenia and taenia omentalis. They are abundant in the caecum and sigmoid colon and absent in the rectum [2].

CT is the usual modality for diagnosis and features include:

- Ovoid mass with central fat density and peri-lesional inflammatory change adjacent to the colonic wall.
- “Central dot sign”—central high density dot in the lesion representing a thrombosed vessel, also known as the “dense central vessel sign” (Fig. 1) [3].
- “Hyperattenuating/hyperdense ring sign”—a hyperdense enhancing rim surrounding the lesion [4].
- Extension of the inflammatory changes to involve the local peritoneal surfaces is possible.
- Calcification within the infarcted lesion may occur over time.

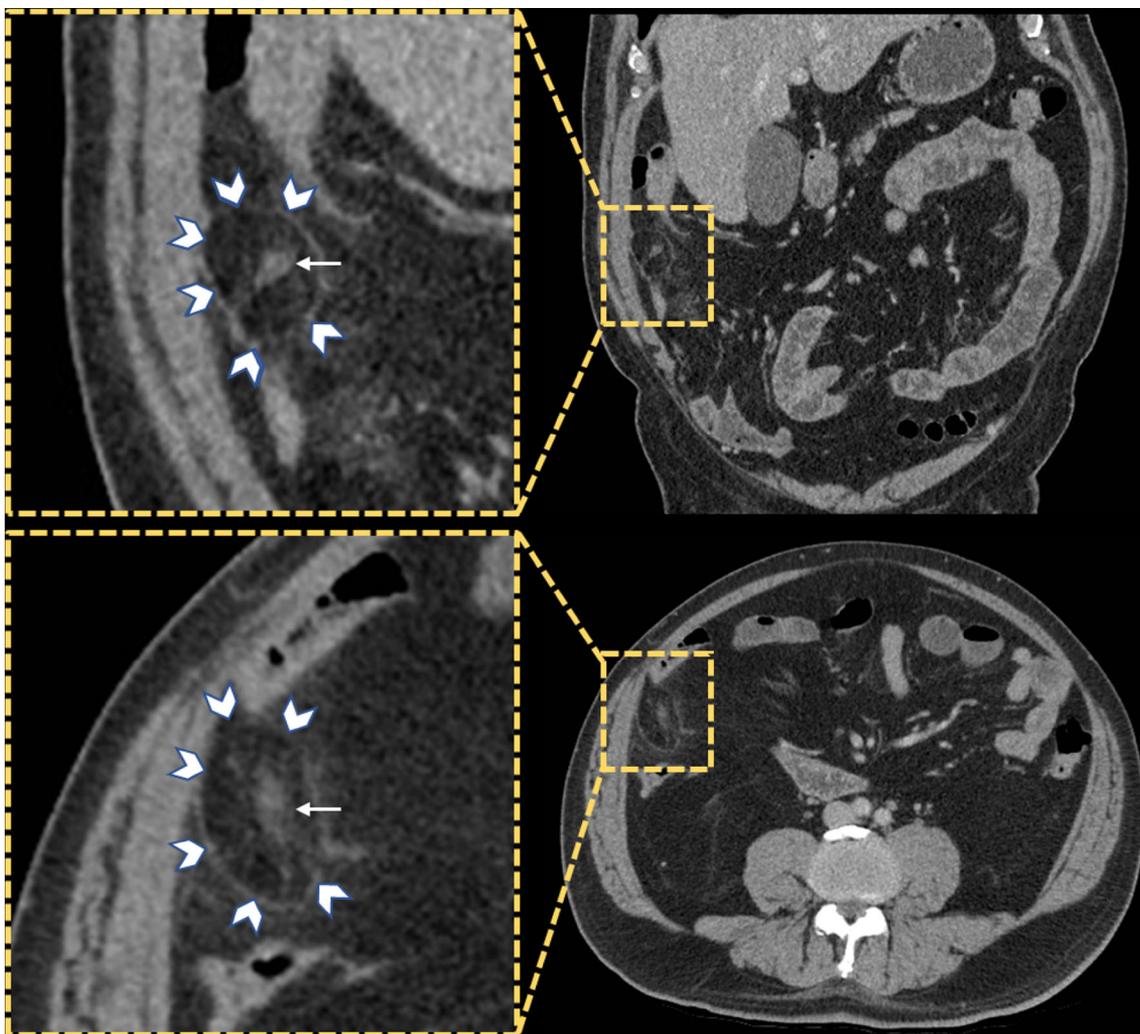


Fig. 1. Coronal and Axial CT images demonstrating the central dot sign (white arrows) and hyperdense ring sign (white chevrons) in a case of right sided epiploic appendagitis.

Compliance with ethical standards

Sources of funding None.

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval For this type of study, formal consent is not required.

References

- Almeida AT, Melão L, Viamonte B, Cunha R, Pereira JM (2009) Epiploic appendagitis: an entity frequently unknown to clinicians—diagnostic imaging, pitfalls, and look-alikes. *AJR* 193(5):1243–1251
- Brant WE, Helms CA (2012) *Fundamentals of diagnostic radiology*, 4th edn. Philadelphia: Lippincott Williams & Wilkins
- Eberhardt SC, Strickland CD, Epstein KN (2016) Radiology of epiploic appendages: acute appendagitis, post-infarcted appendages, and imaging natural history. *Abdom Radiol (NY)*. 41(8):1653–1665
- Han Q, Nair RT, DiSantis DJ (2016) The hyperattenuating ring sign of acute epiploic appendagitis. *Abdom Radiol (NY)*. 41(7):1431–1432