

Lipomatosis of the ileocecal valve: A not to miss diagnosis when performing magnetic resonance enterography

Giuseppe Cicero¹  | Socrate Pallio² | Tommaso D'Angelo¹ | Silvio Mazziotti¹

¹Section of Radiological Sciences, Department of Biomedical Sciences and Morphological and Functional Imaging, University of Messina, Messina, Italy

²Digestive Diseases Endoscopy Unit, University of Messina, Messina, Italy

Correspondence

Giuseppe Cicero, Department of Biomedical Sciences and Morphological and Functional Imaging, University of Messina, Via Consolare Valeria, 1, 98100 Messina, Italy.

Email: gcicero@unime.it

Abstract

Lipomatosis of ileocecal valve is a rare condition that can be missed using the standard protocol of Magnetic Resonance Enterography. Additional T1-weighted scans without fat saturation can be helpful when adipose lesions of the bowel are suspected.

KEYWORDS

ileocecal valve, lipomatosis, magnetic resonance enterography

1 | INTRODUCTION

A 55-year-old male patient suffering from recurrent sub-occlusive episodes and recent acute onset of abdominal pain localized in the right iliac fossa was admitted to our hospital.

After a review of clinical history and laboratory tests, the patient underwent Magnetic Resonance Enterography (MRE) with a clinical suspicion of Crohn's disease.

MRE showed a lesion within the ileocecal valve, iso- to hypointense than the surrounding intestinal content on HASTE T2-weighted sequence and hypointense on SPAIR T2-w scan. This finding was also characterized by low signal intensity on T1-weighted with fat saturation and diffusion-weighted imaging (DWI).

Therefore, T1-weighted scans without fat saturation, not generally included in the standard MRE protocol, were

obtained. These images demonstrated an intensity signal similar to the mesenteric fat, allowing the diagnosis of lipohyperplasia of the ileocecal valve, then confirmed by ileocolonoscopy (Figures 1, 2).

Lipomatosis of the ileocecal valve is a rare condition caused by a proliferation of submucosal adipose tissue, usually detected as an incidentaloma at radiologic imaging.¹

This finding might be misinterpreted or missed using the standard MRE protocol, since only T1-weighted scans with fat saturation, T2-weighted, and DWI images are included.²

In conclusion, our case demonstrates that when lipomatosis or fat intestinal lesion is suspected at MRE, performance of T1-weighted sequences without fat suppression can be of great help in order to achieve the right diagnosis.

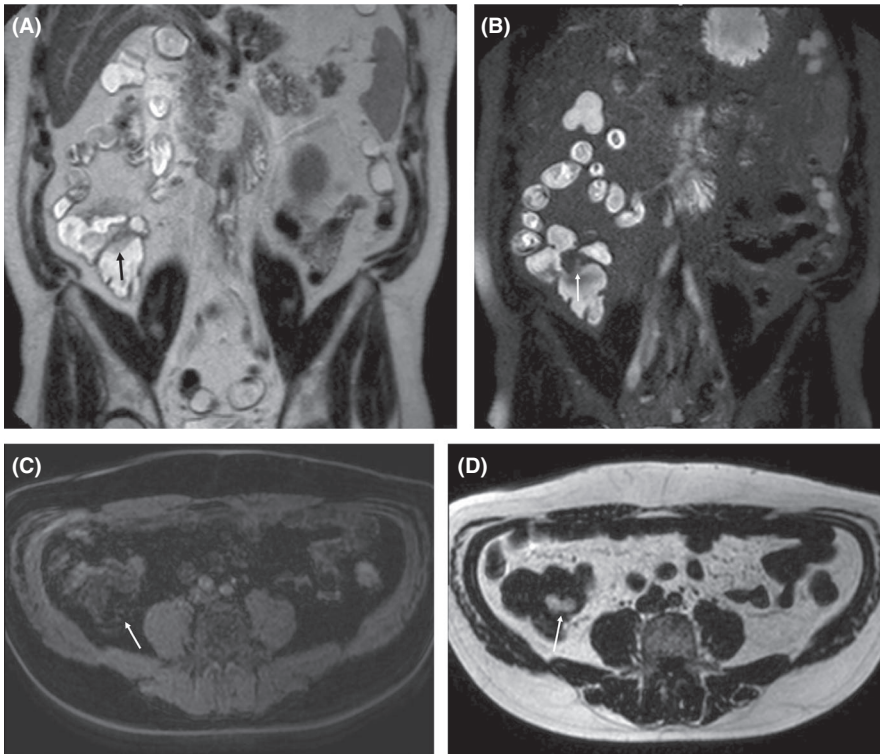


FIGURE 1 A iso- to hypointense lesion in the ileocecal valve region (arrow) is detectable on coronal HASTE T2-w image (A), characterized by drop of signal intensity on coronal SPAIR T2-w (B) and axial DIXON T1-w with FS (C). Axial DIXON T1-w image without FS (D) demonstrated a signal intensity similar to the mesenteric fat, allowing the diagnosis of lipomatosis of the ileocecal valve

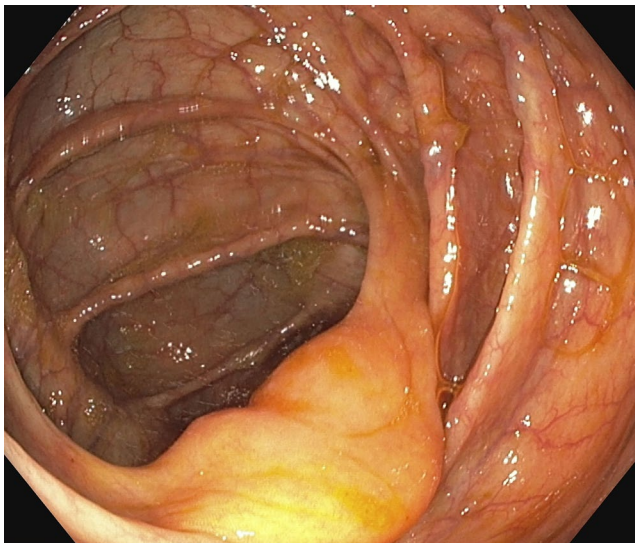


FIGURE 2 Colonoscopy picture confirming the presence of a fatty infiltration of the ileocecal valve referable to lipomatosis

ACKNOWLEDGMENTS

Published with written consent of the patient.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

AUTHOR CONTRIBUTIONS

Giuseppe Cicero: wrote the manuscript and involved in conception of the idea. Socrate Pallio: collected the

data. Tommaso D'Angelo: reviewed the literature. Silvio Mazziotti: involved in supervision of the work and final manuscript approval.

ETHICAL APPROVAL

This work was in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

ORCID

Giuseppe Cicero  <https://orcid.org/0000-0001-9414-4627>

REFERENCES

1. Thompson WM. Imaging and findings of lipomas of the gastrointestinal tract. *AJR Am J Roentgenol.* 2005;184(4):1163-1171. <https://doi.org/10.2214/ajr.184.4.01841163>
2. Cicero G, Ascenti G, Bottari A, Catanzariti F, Blandino A, Mazziotti S. MR enterography: what is next after Crohn's disease? *Jpn J Radiol.* 2019;37(7):511-517. <https://doi.org/10.1007/s11604-019-00838-y>

How to cite this article: Cicero G, Pallio S, D'Angelo T, Mazziotti S. Lipomatosis of the ileocecal valve: A not to miss diagnosis when performing magnetic resonance enterography. *Clin Case Rep.* 2021;9:e04316. <https://doi.org/10.1002/ccr3.4316>