

MRI CHARACTERIZATION OF NEOPLASTIC AND NON NEOPLASTIC MESENTERIC MASSES

Sajeev Ezhapilli¹, Jianhai Li¹, John Chenevey¹, William Small¹, Volkan Adsay², and Pardeep Mittal¹

¹Radiology, Emory university, Atlanta, GA, United States, ²Pathology, Emory university, Atlanta, GA, United States

Purpose:

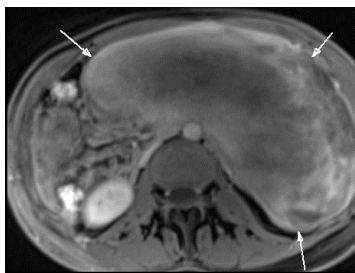
- To illustrate the diverse mesenteric masses that can be seen with MR imaging and demonstrate their MRI characteristics.
- To assess the ability of magnetic resonance imaging (MRI) to differentiate malignant mesenteric neoplasms from benign mesenteric tumor and pseudotumor and evaluate extent of involvement.

Methods :

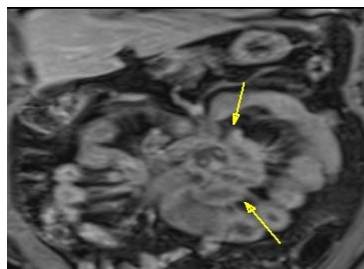
The presentation includes the review of MR examination of patients for characterization of mesenteric pathologies using dedicated MR abdomen protocol including breath-hold, fat-suppressed T2-weighted imaging and fat-suppressed, contrast enhanced (Gadobenate Dimeglumine) imaging of the abdomen and pelvis and imaging findings were correlated with postoperative and histopathological findings.

Discussion: Most mesenteric masses are secondary entities whereas primary peritoneal neoplasms are uncommon, the majority of which are benign. Peritoneal metastases from gynecological malignancies, as well as carcinomas of the stomach and colon constitute a large part of secondary mesenteric neoplasms. Of benign primary peritoneal tumors, desmoid tumor outnumbers other mesenchymal tumors like lipoma, neurofibroma and schwannoma while primary malignant mesenteric tumor like liposarcoma and carcinoid are rare. Occasionally nonneoplastic conditions such as mesenteric fibromatosis, sclerosing mesenteritis, and inflammatory pseudotumor manifest with a soft-tissue mass of the mesentery. The benefits of MRI over CT of abdomen for peritoneal imaging include multiplanar capabilities and superior soft-tissue contrast which assists precise and detailed tumor delineation and extension to adjacent structures thereby increasing diagnostic accuracy and improving preoperative intervention as well as promoting successful management and followup of such lesions. Optimal MRI of the peritoneum comprising fat suppression and dynamic contrast-enhanced imaging inclusive of delayed imaging are instrumental to successful characterization of mesenteric lesions.

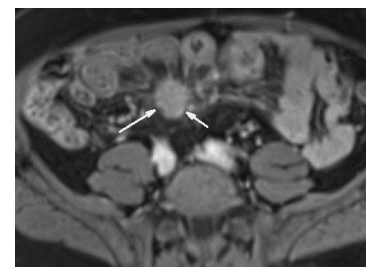
Conclusion: Recognition of neoplastic and nonneoplastic pathologies resulting in mesenteric masses aids the clinician in identifying and managing these diseases. MRI with its superior soft tissue characterization and multiplanar abilities is an excellent diagnostic tool for mesenteric mass identification, characterization, and staging. MRI also assists in differentiating neoplastic and non-neoplastic lesions thereby facilitating appropriate prediction of histological composition and guiding management.



Mesenteric fibromatosis



Sclerosing mesenteritis



Carcinoid tumor

References :

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