

Response to reviewers:

Name of Journal: [WorldJournalofGastrointestinalPathophysiology](#)

ESPS Manuscript No: [7150](#)

Title: [Pancreatitis-ImagingApproach](#)

Authors (typed):

[KiranK.Busireddy,MamdohAlObaidy,MiguelRamalho,](#)

[JanakaKalubowila,LiuBaodong,IlariaSantagostino,RichardC.Semelka](#)

I have the following comments:

**1) Reading the review, the reader gets the impression that MRI imaging offers some significant advantages over CECT in the diagnostic workup of pancreatitis. However, as the authors know, MRI is worldwide not the preferred approach in the initial diagnostic workup of pancreatitis and is often replaced by CECT throughout the monitoring of the disease. How would the authors comment on this aspect? What are the factors that make CECT the more frequently applied imaging approach in pancreatitis? The authors refer to few factors in the "Summary" section, but did not discuss these aspects in detail.**

We agree with the reviewer, however we wanted to emphasize that MRI is also of equal diagnostic performance of CT for the diagnosis and follow up of acute and chronic pancreatitis. Also MRI is a non-ionizing cross sectional imaging method and has a safer intravenous contrast profile. This is particularly important in patients with acute pancreatitis, especially those requiring repeated imaging follow up and knowing that certain patients with acute pancreatitis will have concomitant some degree of renal impairment. On the other hand MRI offers higher sensitivity for the diagnosis of very subtle changes of acute

pancreatitis (ie pancreatic interstitial and peripancreatic edema) and also early manifestations of chronic pancreatitis. The factors that make CECT the most frequently applied imaging approach in pancreatitis are related to its universal availability (especially near to the emergency room), faster scanning times, and the relatively easier interpretability by physicians and general radiologists. We have integrated this response into the manuscript for clarification.

**2) One imaging modality that can offer unique local resolution in the diagnostic workup of pancreatitis is endoscopic ultrasound (EUS). In such a review on imaging in pancreatitis, EUS must be mentioned and discussed in sufficient detail.**

We have done this as suggested.

**3) The authors have made the remarkable effort to address the diagnostic difficulty related to distinguishing chronic pancreatitis from pancreatic cancer. Did they consider addressing the role of PET/PET-CT in this section?**

This issue has been addressed as suggested.

**4) In patients with acute necrotizing pancreatitis with complications (e.g. peripancreatic fluid collections), imaging serves to monitor the course of the disease and complications. Can the authors make recommendations toward which imaging modality to use at which stage of the disease?**

For acute presentation CT might be the preferred method for the reasons mentioned above. However, as demonstrated, MRI carries the same diagnostic

performance with the additive advantage of lack of ionizing radiation (particularly important for radiosensitive populations and in patients requiring multiple follow ups). In regards to which state of the diseases should imaging be utilized, it should be based mainly on clinical presentation and patient's constitutional symptoms, which might suggest development of complications. However, to our knowledge, there are no definite guidelines for the frequency of follow-ups, which are mainly based on clinical and laboratory findings. We have integrated this response into the manuscript for clarification.

**5) The images that the authors provided are classical examples of the discussed diseases or complications. Is it possible for the authors to depict more unique cases that may be of greater interest to the professional radiological reader?**

We appreciate the comment of the author. We also think that unique or difficult cases of pancreatitis might be of an interest to the professional subspecialized radiologist, however our main purpose was to review the role of imaging in the diagnosis and follow-up of pancreatitis, and illustrate the various basic imaging findings.