

Usefulness of procalcitonin to assess the need for surgery and the presence of ischemia and necrosis in patients with small bowel obstruction

Utilidad de la procalcitonina para valorar la necesidad de cirugía y la presencia de isquemia y necrosis en pacientes con obstrucción del intestino delgado

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To the editor,

I have read with great interest the original article by Evaristo-Méndez et al.¹ published in *Cirugía y Cirujanos*. This work reflects the spirit of surgeons to support the need for surgical intervention in patients with small bowel obstruction.

We would like to congratulate the authors for their enthusiasm for conducting a prospective study of high scientific value to the benefit of patient care.

Their results are highly interesting. Due to the physiology of procalcitonin, we believe that in the study it is necessary to exclude patients with chronic pathologies susceptible to modifying the inflammatory-immune response, previous history of cancer, immunosuppression, chronic organ failure, drug addiction, previous treatment with chemotherapy or radiotherapy, post-operative hospitalization of < 24 h, or those who have undergone surgical procedures for any other cause within a period of < 90 days.

In a multicenter study that included 128 patients diagnosed with ischemic colitis and mesenteric ischemia, higher procalcitonin values were reported in those who had necrosis and died, which led to

conclude that procalcitonin can be used as a necrosis marker². One of the largest meta-analyses reported in world literature includes five studies and a total of 659 patients, and reports that sensitivity for the detection of bowel ischemia ranged from 72% to 100%, and specificity was between 68% and 91.3%, concluding that procalcitonin can be used in regular practice as a tool for diagnosing bowel ischemia³.

A good marker should be useful for the diagnosis of a pathology and for assessing its evolution, that is, act as a prognostic factor. Under this premise, there is currently no marker that 100% complies with these characteristics. In surgical terms, it translates into a delay in surgical exploration and an increase in mortality. Therefore, as the authors of the paper themselves acknowledge, it is worth to continue carrying out further studies to reaffirm or invalidate the presented findings.

Congratulations on the cited work, since making the decision to re-operate is highly complicated and there are only few prospective articles that look into the possible presence of ischemia or necrosis in small bowel acute mechanical obstruction.

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Conflict of interests

The authors declare that they have no conflicts of interest.

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