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- <http://dx.doi.org/10.1016/j.gie.2017.02.032>

## Does the fluid choice matter for prevention of post-ERCP pancreatitis?



To the Editor:

We read with great interest the article by Mok et al<sup>1</sup> about the role of lactated Ringer's (LR) solution with rectal indomethacin (IND) for the prevention of post-ERCP pancreatitis (PEP) and readmission rates. The authors compared 4 treatment arms: LR + IND, LR + placebo, normal saline solution (NS) + placebo, and NS + IND. They reported that the choice of fluid is important because the best protocol for prevention of PEP was reported to be LR + IND, inasmuch as the rate of PEP in this group was lowest compared with all of the other groups.

There is an ongoing debate on the type of intravenous fluid (IVF) that is more effective in resuscitation of pancreatic circulation in the setting of PEP. The present study is a very good investigation, providing important data on the issue of type of IVF replacement on PEP. However, we have some concerns about this article. First, we know that post-ERCP fluid resuscitation is as important as pre-ERCP IVF administration for both preventing and decreasing the severity of PEP.<sup>2,3</sup> Nevertheless, it is not clear what volume and type of fluid they administered after ERCP in this article.

The authors also did not report the relation or the effect of prophylaxis on the severity of PEP between the groups. How did C-reactive protein or systemic inflammatory response syndrome (SIRS) data compare between the groups in the setting of PEP? Although the authors stressed rapid IVF administration with LR over NS in the present study, we see that there was no significant difference with regard to the rates of PEP and incidence of readmission between the LR + IND and the NS + IND groups (6% and 13%, 2% and 4%, respectively,  $P > .05$ ). These findings suggest that rather than the type of fluid, rapid IVF administration together with IND before ERCP is started may be important and has a synergistic interaction that is valuable for preventing PEP.

## DISCLOSURE

*All authors disclosed no financial relationships relevant to this publication.*

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## Response:



We thank Dr Ustundag and Dr Saritas<sup>1</sup> for their interest in our work. Our study was designed with 4 groups, including normal saline solution (NS) with placebo, NS with indomethacin (IND), lactated Ringer's solution (LR) with placebo, and LR with IND.<sup>2</sup> If additional intravenous fluids (IVF) were required, as in the case of pancreatitis, additional IVF type was based on study group assignment. Our primary objective was to evaluate the difference in post-ERCP pancreatitis (PEP) and readmission