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LETTER

Is long-lasting mucosal elevation the only valid parameter when evaluating a lifting agent?

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Dear editor

Considering the relevance of the topic, our attention was strongly attracted by the study reported by Al-Taie et al.[1] This study, based on our experience,[2,3] begs some questions. Although the limitations of the lifting agent have been correctly identified by the authors, it would be useful to know the timing and details of the procedures used for preparation of blood, plasma, and serum. The quality of the agent used suggests that it behaves, in terms of viscosity and transparency, like a hematoma at the time of endoscopic resection. Thus, endoscopic visibility for detecting the mucosal layers may be affected by the lifting agent, especially when the amount of fluid used exceeds 1 mL.[4] Rightly, the authors emphasize that methylene or toluidine blue colorants can be used during submucosal resection without impairing visibility. However, they also have the advantage of highlighting the different wall layers according to different rates of absorption, and they are used in a strong concentration.

As demonstrated by other studies,[5–7] we used hydroxypropyl methylcellulose (HPMC) as a safe lifting agent for large resections in order to obtain an effective and longer-lasting submucosal fluid cushion. In this regard, we would like to know if the mucosal elevation rate was evaluated during infiltration. In our case, considering the high viscosity of HPMC, we had to perform dilution with a normal saline solution to obtain smoother injection. Furthermore, in the event of excessive infiltration, the advantage of more permanent lifting becomes an obstacle to endoscopic resection. Thus, if the time of dissipation in blood is much higher that HPMC, as reported by Giday et al,[8] the risk of not being able to recover from an excessive injection increases exponentially.

Currently, only the study by Sato[9] has pioneered the use of blood patch endoscopic mucosal resection, with encouraging results. However, even this technique has been used in only 35 patients, without endoscopic submucosal dissection or an adequate control group, and to treat lesions frequently smaller than 20 mm. Thus, further trials would be needed to validate this type of lifting agent.

In conclusion, although the study reported by Al-Taie et al[1] is a challenging approach and tries to solve one of the main challenges of endoscopic mucosal and submucosal dissection, our opinion is that device improvements, as in the hybrid knife example, will bypass this obstacle by enabling infiltration and resection using the same device. Thus, the hemostatic properties of the blood patch, once proven, could represent a hoemostatic solution after endoscopic resection.

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