



Gastric Stomal Ulcers Following Roux-en-Y Gastric Bypass

A. Hussain · S. EL-Hasani

Published online: 27 August 2014
© Springer Science+Business Media New York 2014

We read with great interest the article of stomal ulcer development following Roux-en-Y gastric bypass by Coblijn et al. [1].

We congratulate the authors for such a comprehensive search of the literatures to tackle this increasingly important problem with the expansion of bariatric and metabolic surgery.

We are very much interested to share our views and experience with the bariatric community.

There is a paucity and diversity in the literatures about marginal ulcer genesis and management. There is general agreement with the conclusions that the aetiology of marginal/stomal ulcers following gastric bypass surgery could be multifactorial but we truly believe that ischaemia of the gastric pouch wall is the cause for a large number of these ulcers.

We believe the ischaemic area is usually trapped between two staple lines, and hence, the incidence of this problem is more with laparoscopic than open surgery. Of notice, also all stomal ulcers occur on gastric and not jejunal side, a fact that indicates whatever cause is, in fact related to the stomach. Also, we noticed from our past experience with open gastric bypass that the incidence of clinical stomal ulceration using hand-sewn anastomosis is almost zero.

If the ischaemia is severe, this will manifest as an anastomotic leak early in the post-operative period. Knowing the abundance of gastric blood supply, usually these ischaemic areas can survive initially and present as marginal ulcer at a later stage. Digestion of the ulcer by the contents of the gastrointestinal tract with variable pH (that can be low and high depending on the procedure) will impede the healing of this ulcer.

Sometimes, the non healing could lead to penetration and fistula formation between the pouch and the surrounding organs and could present with frequent symptoms of pain and gastrointestinal bleeding that necessitates surgery.

We believe that ischaemia is the only credible explanation for marginal ulcers following Roux-en-Y gastric bypass where a small pouch has been created. This pouch has very little acid secretion, *Helicobacter pylori* infection cannot be criticised, parietal cell area has been excluded and there is no alkaline secretion around that anastomosis.

It is difficult to know the definite answer without well-structured long-term studies into the different types of anastomosis (hand sewn, linear stapler, circular stapler) with special reference to the possibility of ischaemia. This is to be supported by studying the surgical physiology of the stomach and the effect of gastric bypass at gastric cellular physiology. One of recent studies showed the role of parietal cell in gastric repair and healing. Therefore, excluding the parietal cell area as an effect of gastric bypass may have a negative impact on aetiology and healing of gastric ulceration [2].

We hope the above comments of value support the article and open a new era and direction of thinking about the aetiology of stomal ulceration following gastric bypass.

Conflict of Interest The authors have no conflict of interest to declare.

References

1. Coblijn UK, Goucham AB, Lagarde SM, et al. Development of ulcer disease after Roux-en-Y gastric bypass, incidence, risk factors, and patient presentation: a systematic review. *Obes Surg.* 2014;24:299–309.
2. Engevik AC, Feng R, Yang L, et al. The acid-secreting parietal cell as an endocrine source of Sonic Hedgehog during gastric repair. *Endocrinology.* 2013;154:4627–39.

A. Hussain (✉) · S. EL-Hasani
King's College Hospital NHS Foundation Trust, London, UK
e-mail: azahrahussain@yahoo.com