

Title: Successful application of a new stapler with reinforcement installed to sleeve gastrectomy in bariatric surgery

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In patients undergoing sleeve gastrectomy, the gastric wall is often thick and readily breakable due to adipose tissue accumulating in the submucosa and the muscularis. When sleeve gastrectomy is performed on such patients, conventional staplers often break or fail to suture the thick and fragile gastric wall, sometimes resulting in serious post-operative complications such as bleeding and/or anastomotic leakage.

As a countermeasure for this problem, we have used a newly available type of stapler, which sandwiches a strip of reinforcement between the staples and the tissue. By stapling the gastric wall from the reinforcement layered atop, the stapler prevents breaking of the tissue and ineffective stapling. The layer of the reinforcement and the gastric wall seems to have a proper physical strength for stapling. Since the introduction of the device, we have experienced no post-operative complications stemming from suture errors. This new stapler can be useful in sleeve gastrectomy.