

AB020. OP20 Robotic mini gastric bypass: is there any advantages?

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Background: Gastric bypass described by Mason & Ito in 1967. Rutledge described mini gastric bypass (MGB) in 1997 with a gastric pouch parallel to lesser curve and loop gastroenterostomy, 200 cm (150–300 cm) from Treitz's Ligament. First laparoscopic mini gastric bypass (LMGB) was made in 2002 and first robotic series presented by Arun Prassad in 2014. In 2015 MGB-OAGB International Club was established. The study aims to describe the technique and analyze our robotic mini gastric bypass (RMGB) cases using da Vinci Xi.

Methods: Steps for RMGB (DaVinci Xi): patients were put in supine position for RMGB. We inserted the camera port through a point (2 cm lateral and 2 cm above) near the umbilicus. After insufflation to 12 mmHg to achieve pneumoperitoneum, patients were put in reverse Trendelenburg position. Following the placement of a Nathanson liver retractor from the epigastrium with direct visual monitoring, we inserted two bilateral hypochondriac ports of 8 mm size. Then, between the previous ports and in left side of the lateral abdomen, we placed an assistant port of 12 mm size. After opening the lesser sac, gastric transection and gastric tube formation were performed. The small intestine is fixed by measuring. After the creation of antecolic gastroenterostomy, methylene blue test is performed and drainage is inserted. The robot is undocked by dessuflation. The study included 59 (14 M) patients with a BMI of 50.3 kg/m² (35-63 kg/m²) undergoing ROAGB. Ergonomic challenges, docking time (DT), total operative time (OT), complications (intraoperative and postoperative: early and late) and lenghth of hospital stay were analysed.

Results: There were no complications during surgery. There were no mortality or conversions to another approach in any patient. DT was 6.5 min (3–16 min) and OT was 54 min. There were no leaks. Length of hospital stay was 3.7 days.

Three patients had complications (trocar site hernia, bleeding from staple line and intraluminal bleeding).

Conclusions: RMGB seems as safe and effective provided that surgical team has enough experiences on the procedure. Use of robot has better surgeon positioning and reduced the ergonomic challenges of bariatric surgery. Especially in super-obese patients therefore it should be the procedure of choice in this group. Also MGB have some advantages like tension free gastroenterostomy, no need for roux leg, low complication rates, low possibility of internal herniation, short operation time, excellent weight loss and other metabolic effects.

Keywords: Mini gastric bypass (MGB); one anastomosis gastric bypass (OAGB); robotic surgery; robotic gastric bypass

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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