FROM LAPAROSCOPIC TO ROBOTIC SLEEVE GASTRECTOMY: A TRANSITION TO AN EASIER AND SAFER APPROACH

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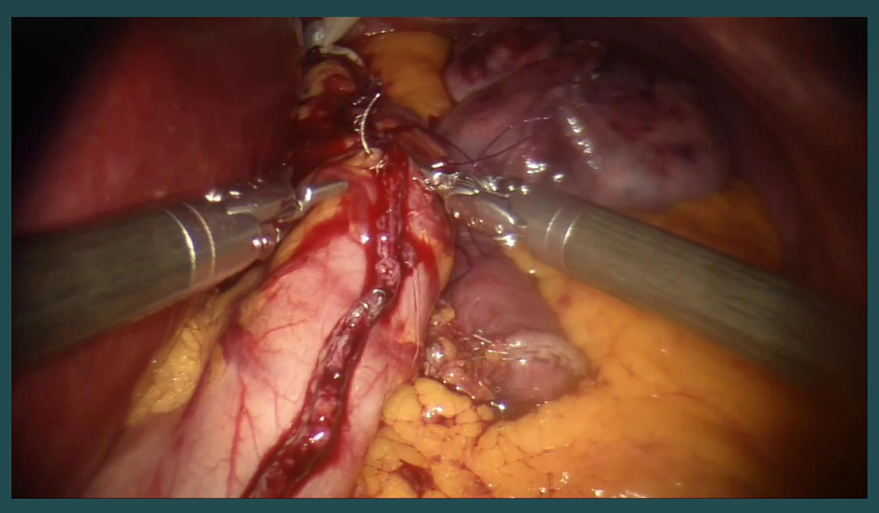
►*BACKGROUND:* There are only few reports on the application of robotics for sleeve gastrectomy, which potentially facilitates the procedure due to enhanced visualization and high dexterity of the instruments. We present our experience as well as our technique in this paper.

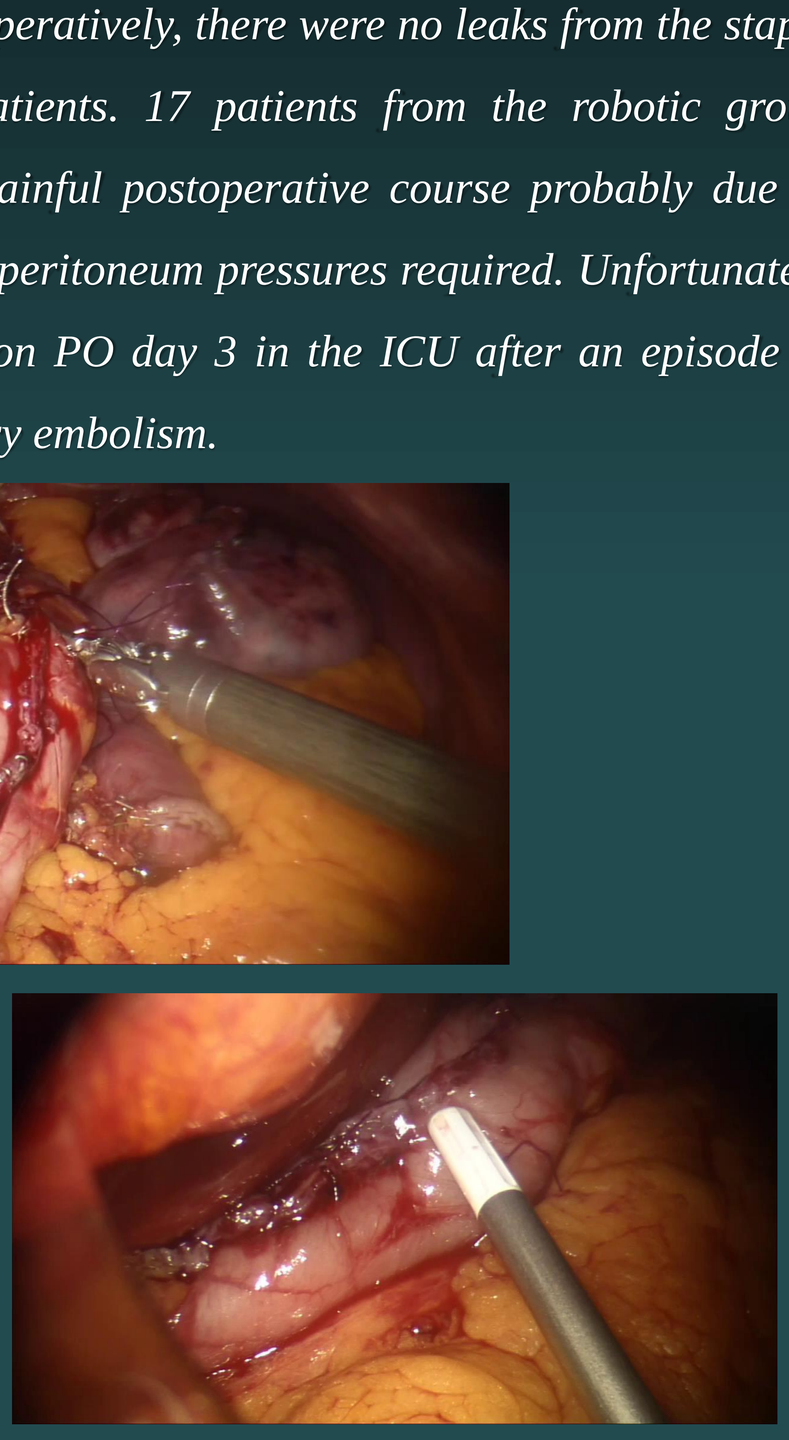
➢ *Methods*

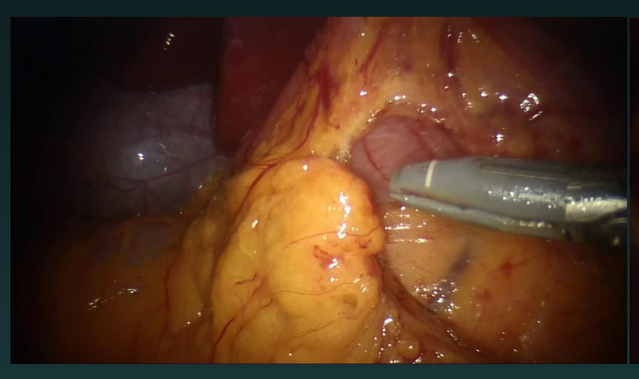
After 515 LAGBs since May 1996, our team slowly adopted sleeve gastrectomy as an efficient bariatric procedure. From February 2009 till February 2015, 35 sleeve gastrectomies have been performed. 22 of them were performed using the da Vinci robotic system. The robotic approach was initially offered in the case of anticipated technical difficulties with superobese patients, but gradually was established as our standardized approach. The procedure is performed routinely by using air-seal trocar for controlling the pneumoperitoneum while division of the short gastrics takes place with the robotic vessel sealer coagulation device. We routinely reinforce the staple line with continuous 3-0 V-lock suture and glue. A Jackson Pratt drain is always left near the staple line. All patients undergo a gastrographin swallow on postoperative day 2 and are discharged on the same day. Routine follow up is on the first week, first month and then every three months.

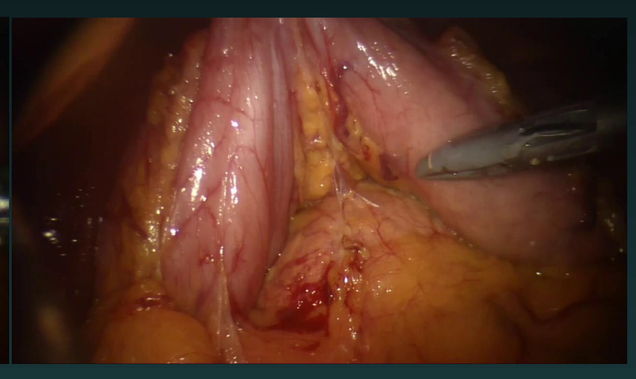
➢ *Results*

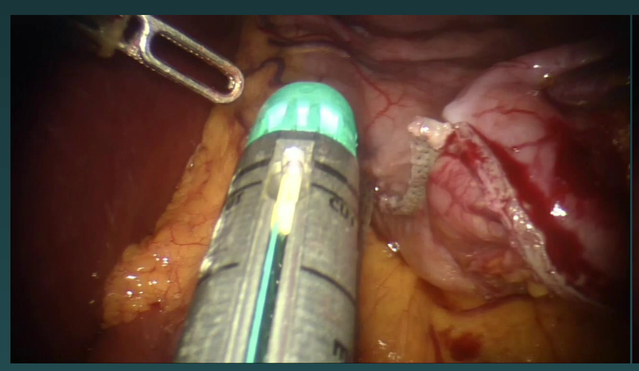
There were no intraoperative complications and the robot facilitated the procedure at all times. Retraction issues of the large left liver lobe were much easier to handle by use of the fourth arm. Postoperatively, there were no leaks from the staple line in all 30 patients. 17 patients from the robotic group reported a less painful postoperative course probably due to the lower pneumoperitoneum pressures required. Unfortunately one patient died on PO day 3 in the ICU after an episode of massive pulmonary embolism.

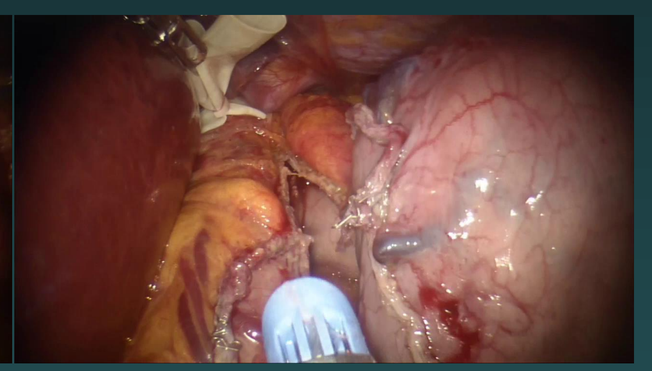












➢ *Conclusions*

Robotic Sleeve Gastrectomy is a promising approach for an already efficient operation. Strengthening of the staple line takes place much more efficiently thanks to the robotic needle drivers and the superior quality of visual field. Finally, the robot seems to offer a shorter learning curve for younger laparoscopic surgeons.

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