

Benefits of mechanical suture in our experience

M.F. Coroş, S. Sorlea, C. Crăciun, G. Rareş, G. Pascarenco, T. Corhan, C. György
Clinica Chirurgie 1, Spital Clinic Judeţean Mureş, România

Abstract

The evolution of mechanical suture technology experienced a continuous improvement but the implementation of these devices in current practice of Romanian surgery encountered difficulties related mostly to increased costs.

Purpose: Review of casuistic related to the use of mechanical suture devices.

Methods: We studied the casuistic between 2008 and July 2011. More parameters were analyzed compared to cases in which manual suture was used.

Results: 74 patients benefited from using mechanical suture. Circular staplers EAEC type were used in 53 cases, TA staplers in 48 cases and Endo GIA in 19 cases. Operations performed were: 44 colo-rectal anastomoses (2 laparoscopic), 9 eso-jejunal anastomoses, 17 gastric resections, 2 duodenal stump closures and 2 rectal stump closures. One (2.56%) colo-rectal anastomotic fistula was found which led to death. There was a single anastomotic imperfection where we performed ileostomy with favorable evolution. Duration of Dixon's operation was shortened by 36 minutes average. The anastomosis could be lowered to 3 cm from the anal verge. There were 3 late local rectal cancer recurrences, 1 recto-vaginal fistula and 1 recto-vesical fistula. There were no anastomotic stenoses.

Conclusions: There were two main advantages of using mechanical anastomosis: 1) the opportunity of palette broadening of laparoscopic operations, 2) the possibility of making safe anastomosis in difficult to access areas (rectum, esophagus). The use of mechanical staplers offers advantages especially in patients with rectal tumors, especially in obese male patients with narrow basin, where we can save many cases from rectal amputation. Staplers bring more comfort to the surgeon offering physical and psychological feeling of a perfect anastomosis. Although staplers cost is high, in selected cases, this disadvantage is offset by reducing the duration of operations, hospitalization and subsequent cost of stomas maintenance.

Key words: stapler, mechanical suture, benefits

Correspondenţă:

Conf. Dr. Coroş Marius
Clinica Chirurgie 1, Spital Clinic Judeţean Mureş
Str. Gh Marinescu Nr 1, Târgu Mureş, România
Tel: 0365-882.631, Fax: 0365-430.385
E-mail: chirurgie.mures@gmail.com