

Laparoscopic Biliopancreatic Diversion with Duodenal Switch - The Most Effective Operation for Type 2 Diabetes Mellitus. How I do it?

Cătălin Copăescu

Ponderas Academic Hospital, Bucharest, Romania

“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

Abstract

Background: Morbid obesity and type 2 diabetes are rapidly increasing worldwide. The conservative treatment is providing a limited control while the more efficient metabolic surgery is more recommended. Biliopancreatic diversion with duodenal switch (BPD-DS) is the operation which provides one of the most stable weight losses and T2DM remission of any bariatric procedure. The aim is to describe the technique of laparoscopic BPD-DS.

Methods: The detailed technical aspects of LBPD-DS are presented. Fiftysix consecutive patients underwent laparoscopic BPD-DS in our Bariatric Surgery Program, meaning 0.7% of the authors' bariatric surgery activity (2002-2018). Thirteen of them had BPD-DS as a primary option and the rest (42 patients, 75%) had the procedure in 2 stages. 48 patients had poorly controlled T2DM. Median hospital length of stay was 6 days (range 3-21 days). There 30-day mortality was nil. Major morbidities occurred in 4 patients (7.1%), including 1 anastomotic leak (1.7%), 3 staple-line hemorrhages (5.3%) 12 BPD-DS patients were lost in the follow-up program and the mean follow up rate for the rest was 62 months (12-156 mo.). The %excess BMI loss was $82 \pm 13\%$ while the T2DM remission rate was 92% (44 pts)

Conclusion: Current evidence suggests that BPD-DS is the most effective metabolic procedure on obesity-related comorbidities, especially on T2DM, with an acceptable morbidity. However, due to its technical complexity and concerns regarding severe metabolic disturbances and malnutrition the utilization of this bariatric surgical procedure is limited compared to other surgical options.

Key words: duodenal switch, laparoscopy, metabolic surgery, morbid obesity, type 2 diabetes mellitus