Early diagnosis and treatment of early leak after laparoscopic Roux en Y gastric bypass is the key point to avoid early mortality

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Background: The high mortality rate of postoperative leak is a major concern after Laparoscopic Roux en Y Gastric Bypass (LRYGB). We report in this study factors influencing the prognosis of such leaks.

Methods: The data of patients after LRYGP has been analyzed from Lille Cohort Obesity Study from 2004 to 2012 for 824 patients. Data from patients initially operated in another centers and secondary transferred in our department for a suspected leak were retrospectively included in the analysis.

Results: 36 patients experienced a postoperative leak (4.4%), most in patients operated in the early experience in our institution (6.1% before June 2009, 2.3% after). In the same period, 12 patients were transferred in our institution for treatment of anastomotic leak. Most of leaks were developed from the Gastro entero anastomosis (25/48, 59%), and (42/48, 88%) developed before day 4 post operative (D4PO). Patients with heart rate (HR)<100 bpm D1PO had <1% risk of peritonitis while risk of 50% in case of HR>120 bpm. All early leaks were managed surgically, half of them by full laparoscopic approach (23; 55%); most of late leaks treated by selective nonoperative management (4/6, 67%). No death occured in this study. Hospital stay was 32 ± 30 days, range from 5 to 123 days. Intensive care unit stay was required in 19 cases for multiorgan failure (median= 23 days, range 3-76). Leaks diagnosed and treated after D1PO had higher risk to developed a multiorgan failure (p<0,001). Only a delay of treatment of more than 24 hours for surgery increased the risk of prolonged hospital stay (respectively 18±15 days vs 68 ± 37 days, p=0,001). Hospital stay and ICU stay was correlated to the delay of surgical exploration (>24 hours) when an early leak occurred (both p<0,001, and respectively r=0,67 and r=0,75).

Conclusion: The early diagnosis of a leak is essential in the first day after LRYGBP. Easy laparoscopic reexplanation for early diagnosis and treatment is an effective option. We assume that a laparoscopic reexamination should be concidered in case of HR>120 bpm in the first day post operative. Selective nonoperative management of leaks should be considered only after D4PO in selected patients.

Biography
Robert Caiazzo is professor of Surgery in the Faculty of medicine at the University of Lille II, Lille, France. Member of the department of general and endocrine surgery at Lille University Hospital, he performed bariatric surgery in a dedicated center for the obesity (CIO Lille) part of the largest hospital in north of europe (CHRU – Lille, 4500 beds).

Robert Caiazzo also participates to a research group at the University of Lille, INSERM U1190, devoted the clinical development of biotherapies for treating diabetes. U1190 Translational Diabetes Research is a funding member of the LABEX European Genomic Institute for Diabetes (E GiD) was classified as “Remarkable” by the CSSS Inserm in 2014. Pr Caiazzo research is devoted to the surgical treatment of endocrine and metabolic disease and focused on metabolic surgery for type 2 diabetes. Pr Caiazzo has authored or co-authored 25 papers in reputed journals. He is also the principal investigator of several ongoing clinical trials of bariatric surgery in Lille.

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