Abteilung für
CHIRURGIE &
GEFÄSSCHIRURGIE
Vorstand: Prim. Dr. Gerhard Jenic

KABEG
LKH VILLACH

Bariatric Revision Surgery for the Treatment of Advanced Liver Parenchymal Damage

(Laparoscopic revision of an Omega-Loop-Bypass to a short-limb-Y-en-Roux-Gastric-Bypass for the treatment of postoperative liver cirrhosis)

T. Primozic, P. Pascoli, R. Van de Haar, C. Druml, M. Vouk, E. Trampitsch, G. Prager, G. Jenic

Introduction: The most used and successful surgical procedure for the treatment of morbid obesity include the Omega Loop and the Y-en-Roux gastric bypass. If the correct indications are observed, the technically simpler one-anastomosis gastric bypass is accepted to be performed. But the danger of malnutrition should always be considered, because it is not outweighed by the advantages in weight loss.

Case study: In a 29-year-old female patient with grade III obesity (BMI 41 kg/m²) a standard Omega Loop bypass was performed in 2018. As part of our standard follow-ups the patient was considered symptom-free with a weight loss of 50kg after 6 months (BMI 22.4 kg/m²).

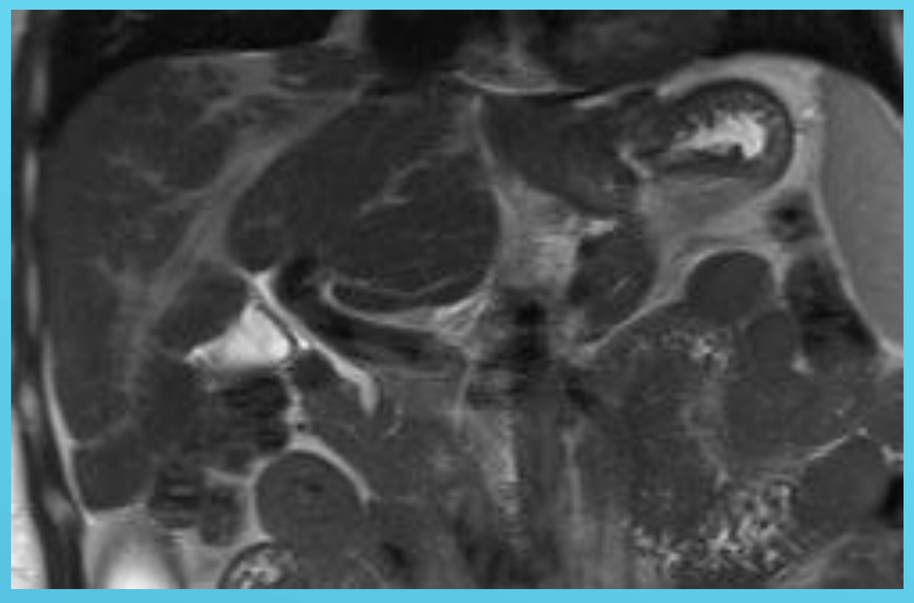
Two years after the operation (August 2020) the patient suffered from chronic diarrhea and elevated liver values and was admitted to the hospital.

In the following diagnostics such as laboratory (Table 1), sonography, CT, MRCP, MR, punch biopsy and fibroscan an **incipient cryptogenic liver cirrhosis** was identified.

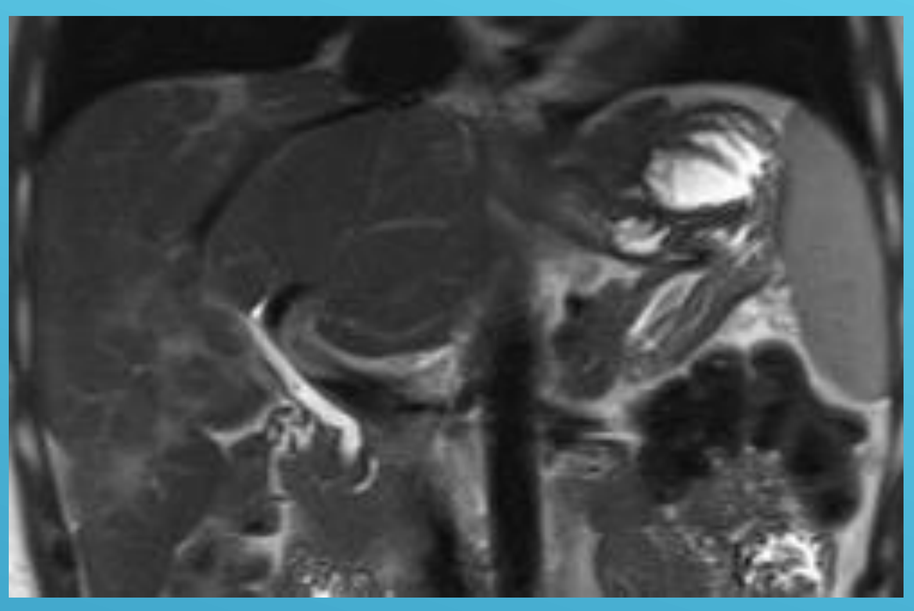
A malabsorption disorder after Omega-Loop bypass was considered to be the cause.

	June 2018	August 2020	September 2020	October 2020	January 2021
	Preoperative	Preoperative	Preoperative	Postoperative	Postoperative
Blood count	Normal	Normal	Normal	Normal	Normal
AST U/l IFCC	28	608	81	43	28
ALT U/l IFCC	40	400	59	34	22
GGT U/l IFCC	52	741	145	130	44
AFP U/l	125	368	141	138	141
Coagulation	Normal	Slightly lower	Normal	Normal	Normal

Table 1 – Laboratory values



Liver MR before and 5 months after the operation



The indication for a **laparoscopic bariatric revision surgery** with conversion of the one-anastomosis-bypass to a short-limb-Y-en-Roux gastric bypass was made in October 2020.

The operation was without complications.

The liver quickly normalized itself, clinically as well as from a laboratory (table 1) and imaging point of view (liver MR).

The weight remained constant.

Conclusion:

The therapy of morbid obesity requires the expertise of an established center with interdisciplinary care as our successful management of a young patient with impending irreparable damage to the liver parenchyma shows.

Literature et al:

- Lee Y, Doumouras AG, Yu J, Brar K, Banfield L, Gmora S, et al.: Complete Resolution of Nonalcoholic Fatty Liver Disease After Bariatric Surgery: A Systematic Review and Meta-Analysis. Clin Gastroenterol Hepatol 2019;17(6):1040-1060.
- Lammers WJ, van Tilburg AJ, Apers JA, Wiebolt J. Liver failure caused by prolonged state of malnutrition following bariatric surgery. World J Hepatol 2018;10(3):396-399.