

# The endoscopic treatment of biliary stricture after live-donor liver transplantation

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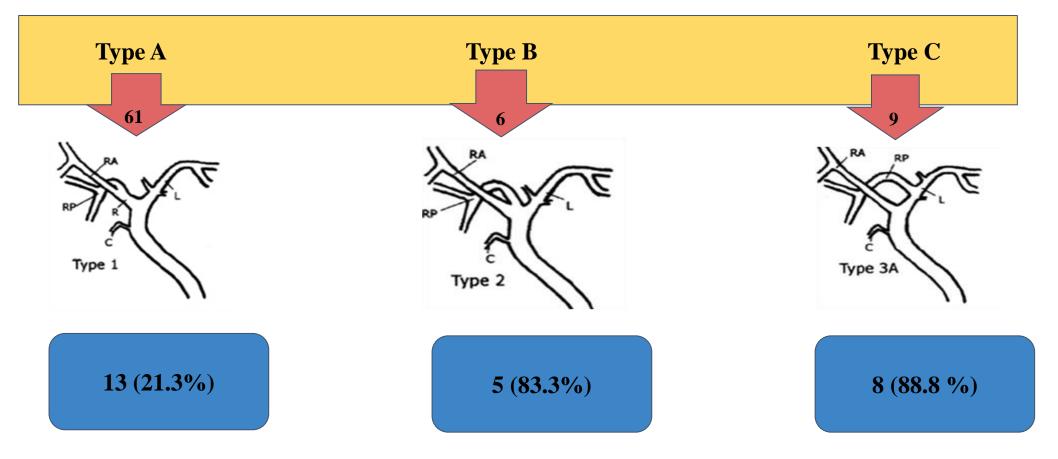
### Disclosure:

We herewith declare the following paid or unpaid consultancies, business interests or sources of honoraria payments for the past five years, and anything else which could potentially be viewed as a conflict of interest:

NOTHING TO DECLARE

## Background/aims:

The purpose is a retrospective analysis of ET of BC after LDLT. From December 2015 to 2018, we analyzed 76 patients. The LT of right lobe in 70 (94,6%) patients, the left lobe in 3 (4%) patients, right posterior section in 1 (0.9%) patient. In 76 (100%) cases in 26 (35 %) patients BC occurred. The early strictures (<90 days) of the duct to duct anastomosis developed in 11 (44%) patients and 15 (54%) recipients developed late strictures (>720 days).

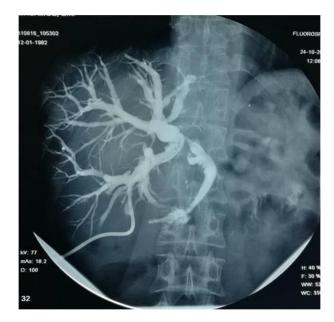


	Characteristics of recipients with BC	Number of patients	%
Sex:	male\female	14/12	52/48
Splint:	Carcass drainage after LT	14	56
Types of biliary ducts:	A B C	15 14 7	56 16 28
Cause of cirrhosis:	Hepatitis C,B HCC Other	23 1 2	88 3.8 7.6
Biliary reconstruction:	DD 2DD DD+HJ	21 3 2	80.7 11.6 7.7
Complications:	Anastomotic stricture Biliary leakage	20 6	76 24
Time:	Early ( before 6 m) Late (after 6 m)	15 11	56 44
Outcome:	no recurrence during 3 months after removing PS	4	15

Methods:

The ET performed to 17 (80%) patients. After failed ERCP 4 (15%) patients treated by PTBD. Also, 5 (19%) cases solved by surgery. 4 patients undergone Roux-en-Y and 1 patient require retransplantation.

# First session ERCP with Rendezvous



#### PTBD + ERCP after LDLT:



Second session ERCP changing PS

Third session ERCP changing PS and deploy 2 PS

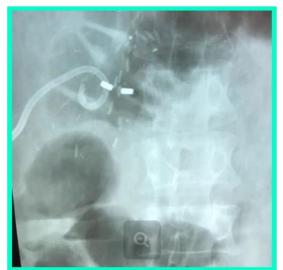


# Case of using magnetic compression anastomosis











Results:

The total number of endoscopic correction was performed for 21 (80%) patients. Technical success was in 14 (53%) recipients. 4 (20%) patients performed various types of dilation before PS. 10 (50%) cases, the stricture resolved by stenting 10 Fr. without dilatation. In severe stenosis, it begins from PS 7.0 or 8.5 Fr. Later, PS was replaced to 10 Fr. After 3-4 months, additional PS implanted. 8 (48%) patients underwent more than 3 sessions of ERCP with the installation of up to 3 plastic stents. "Rendezvous" technique done in 3 (12%) cases. 1 case a magnetic compression anastomosis installed by retrograde and antegrade way. At that moment we had 67 % of successful and 4

patients (14,5 %) no recurrence

Treatment	Number	Complications	Mortality
ERCP:			
BD+PS	14	cholangitis - 3	liver failure - 1
PS	7	biliary leakage - 1	
Randezvous:			
Cannulation success	2	-	-
MCA	1		
PTBD:	3	cholangitis - 1	liver failure - 1
Surgery:			transplantate necrosis -
RYHJ	4	cholangitis - 1	1
Retransplantation	1		not surgery related - 1
Tot	tal:	6 (19,2%)	4 (15,3 %)

#### Conclusions:

The ET begins at first 6 months after LDLT has a more favorable outcome and requires fewer interventions. The correction after 6 months is less effective and requires more ERCP. The favorable outcome of BC treatment depends on several factors. Early diagnosis of occurring BC, the presence of a wide range of necessary tools and endoscopist experience in treating this pathology.

