

# Review of: "Biliary Complications Following Liver Transplantation: The First Single-Center Tunisian Experience"

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The manuscript of Wael Ferjaoui, Biliary Complications Following Liver Transplantation: The First Single-Center Tunisian Experience, was reviewed. This is the first publication from Tunisia that analyzes the biliary complications of liver transplantation. The authors gave important information about the frequency of this type of complication and searched for its risk factors. The frequency of these complications is quite high in their experience, and these complications contributed even to the mortality of the patients. It is true that the bile duct anastomosis is the Achilles heel of liver transplantation (OLT); its complications require multiple interventions but usually do not result in loss of the graft or even important mortality. Anyway, this work has its importance because the authors describe the real situation in their center – knowing these data, they can take the next steps in order to reduce biliary and even vascular complications and ameliorate their results.

Commentaries, questions, and criticism:

- Since December 1999, Mongi Slim Hospital performed 56 transplantations until February 2020. But in the paper, 49 OLTs are analyzed in 47 patients. It means that at least 7 patients (or 9?) died in the early perioperative period or had incomplete records (exclusion criteria). It is an important proportion if we consider the total number.
- The early biliary complications rate was 21%, with a bile leakage rate of

13% and a stricture rate of 9% -  $13+9=22$

- The "late biliary complications rate was 41%, with a leakage rate of 10%, stricture rate of 38%, and lithiasis rate of 7%."  $10+38+7=55$

- "Two recipients (1%) didn't have the same ABO blood group...". Another mistake with the numbers: 2 of 18, correctly 11%.
- "Eighteen patients (38%) had biliary complications. They were early in 10 patients and late in 11 patients." Again, the numbers induce confusion: certainly, some patients had more than one complication. It would be interesting to know whether early and different late complications occurred in some patients?
- Biliary leakage occurred in 9 patients. It is doubtful that a leakage at day 45 is really "late" or an early leakage detected lately. None of these cases was treated by ERCP, sphincterotomy, and stent placement, considered as a treatment of

choice and an excellent response in the majority.

- Two patients received choledochojejunostomy as the primary biliary reconstruction. What type of biliary complication did they have?
- “The early mortality rate was 17% (3 patients). The average time was 12 days.

The late mortality rate was 22%. The average time was 38 months. "It is not clear for me whether this mortality is of the whole group or only those who had biliary complications. In the latter case, 7 of 18 patients with biliary complications died? It would be a very unusually high mortality rate.