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

Malgorzata Markiewicz-Kijewska[1]

1 Children's Memorial Health Institute

Potential competing interests: No potential competing interests to declare.

Dear Sirs

The paper entitled **Biliary Complications Following Liver Transplantation: The First Single-Center Tunisian Experience by Sahir Omrani, Fatma Medhioub**, **Firas Ayadi**, **Nizar Cherni**, **Ferjaoui Wael**[*], **Mestiri Hafedh**, **Rached Bayar (Qeios ID: R33AJ9)** seems interesting but requires many modifications and clarification on some theses.

In the section about materials and methods, the authors should clarify many things. The material is not clear. It would be better to show data in tables with sections on patient characteristics, graft characteristics, etc. Authors should present the standard protocol of surgical techniques for LTx, postoperative care, and follow-up. What kind of bile duct anastomosis was done? What does it mean choledocho-choledochostomy – is it a duct-to-duct anastomosis with a drain? If yes, what kind of drain: T-tube, stent, double-J, or other? What does it mean choledochojejunostomy – is it an anastomosis of the duct with the RY loop or with the jejunum? What depends on the kind of bile duct anastomosis: on the type of liver graft – deceased donor or living-related donor? On the primary diagnosis? Others?

Authors wrote: “Two recipients (1%) didn’t have the same ABO blood group as the donors.” – it should be clarified what kind of transplants were done: ABO – incompatible or ABO non-identical – it does not mean the same, and usually ABO-incompatible LTx is a risk factor for biliary complications due to ABO mismatch (usually intrahepatic biliary complications). The author did not perform an analysis of immunological problems – acute rejection episodes, reasons for chronic rejections. Did patients with chronic rejection have biliary complications or not?

I did not understand what “conservative treatment” means for biliary complications – it should be explained in the article. I think it should be clarified how authors diagnosed biliary complications (lab tests, diagnostic imaging – US, MRI, other) and on what different methods of treatment depended. Authors should present a standard protocol of treatment for biliary complications. Was the CMV infection primary or a reactivation? Treatment should be divided into endoscopic, surgical, or other. I did not find the results of treatment of biliary complications – are patients in good general condition, what are the biochemical liver tests, time of follow-up? I did not understand why in the results 18 patients had biliary complications: 10 early and 11 late (in summary, 21 pts – does it mean that some patients had many episodes of biliary complications?).

I did not find information about statistical equipment and what kind of statistical program was used. Statistical analysis was

on two groups – but it was not described in detail. I think a Kaplan-Meier curve should be added to present the patients' and grafts' outcomes.

Authors mentioned portal hypertension – it was a risk factor (esophageal varices, etc.) for biliary complications. Does it mean that patients had portal hypertension after transplantation or before? Usually, after liver transplantation with very good portal flow, portal hypertension should disappear.

The discussion is very chaotic and should be organized. In the discussion, there are some theses which were not presented in the results (for example, hepatic artery thrombosis and biliary complications). There are some abbreviations which are not explained in the paper. There is a lack of consent of the ethical committee also.

Best regards,

Małgorzata Markiewicz-Kijewska