Reviewer's report

Title: In-hospital cerebrovascular complications following orthotopic liver transplantation: A retrospective study

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Reviewer: Bryan Young

Reviewer's report:

The paper is a retrospective review of patients with orthotopic liver transplants (OLT), examining cerebrovascular complications during the same hospital admission as for the transplants. The authors found 10 patients of 358 had cerebrovascular complications, 8 of which were hemorrhages, 6 of whom died. The hemorrhages were lobar or deep and correlated with advanced age and systemic infections, but not with coagulopathies.

The paper has merit and is of interest. There are some major issues that should, however, be addressed:

1. The association of infections with hemorrhages is striking. We need more detail about specific organisms. Did any patients have vascular imaging or post-mortem exams to reveal vasculitis or mycotic aneurysms?
2. In our experience and in the literature aspergillus is a common cause of such hemorrhages. Did any cases involve this organism?
3. The timing is important with respect to post-transplant complications. Suggest you use a table with details, including age, sex, timing of complication relative to transplant, underlying organism, type or site of hemorrhage (e.g., lobar, basal ganglionic, etc.) and medications, especially immunosuppressive drugs. There is mention of a table, but it was not included.
4. The organization/structure of the paper needs improvement. It lacks a Discussion section. This could be added, perhaps with some information removed from the results and background sections. In the Discussion the authors might compare their findings with those of other publications on the topic and offer some explanations as to how they occur. They might also suggest how further studies might be done, e.g., prospectively to identify those of greater risk, how such serious complications might be avoided, e.g., better bacteriologic surveillance, infection control measures, more prompt systemic antibiotic/antifungal therapy.
5. It might be useful, for more general information for the neurologist or neuro-intensivist to review the incidence of ischemic and hemorrhagic strokes in other transplant patients, e.g., these complications are more common in patients with bone marrow and cardiac transplants.

Minor point: Grammatical improvements are needed. Phrasing is often awkward.
Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.

Bryan Young