



# Establishing a blueprint for successful liver transplantation for alcohol-related cirrhosis: the importance of a multidisciplinary team

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Liver transplantation (LT) for alcohol-related liver disease (ALD) has come a long way since the implementation of LT as a standard procedure. Initially considered a contraindication due to poor outcomes and moral issues (1,2), it is nowadays the most common indication for LT in Western countries (3,4). Patient and graft survival in this setting are excellent (5). However, relapse rates remain high (6), which jeopardizes long-term survival and the acceptance of the transplant team for these procedures. The evaluation of the suitability to a LT for a potential candidate is therefore essential. The length of sobriety, namely over six months, has longtime been considered as the condition sine qua non. The “6-month rule” is insufficient to predict the risk of relapse and is progressively being abandoned by learned societies recommendations (7,8). Moreover, situations in which a recent alcohol consumption is obvious, such as alcoholic hepatitis or positive blood and/or urine test before the procedure, are associated with good outcomes (9-11).

The utilization of criteria based solely on the length of sobriety is not equitable since it excludes some patients at low risk of relapse. Besides, the benefit of an “early” versus “delayed” LT strategy has been demonstrated by many teams (12,13). Instead of concentrating only on the length of sobriety, the focus must be done in the pre-transplant evaluation and the post-transplant support. Easy-to-use clinical scores such as High Risk Alcoholism Relapse (HRAR, which includes daily alcohol consumption, length of drinking history, and previous treatment history)

are reliable tools to predict patients at risk of relapse (14). Furthermore, systematic referral to an addiction specialist improves the quality of the pre-transplant evaluation and decreases post-transplant relapse rates (15,16). When patients are evaluated by an addiction specialist after the LT, a relapse is more frequently detected, which can be helpful for the graft and patient survival (17).

Yet, few transplant teams seem ready to implement a multidisciplinary strategy to improve patient selection and post-transplant outcomes. In a future issue of *Gastroenterology*, Carrique *et al.* (18) provide a blueprint for the implementation of a successful program aiming to improve LT for ALD results while enabling an equitable and multidisciplinary assessment of potential candidates as well as a structured support to prevent (and early detect) relapse. The “Ontario ALD Pilot Program” was launched in 2018 in response to an increasing rate of patients referred for pre-transplant evaluation for ALD. It consists in a finely tuned network of transplant hepatologists, addiction and consultation-liaison psychiatrists, social workers, and a nurse practitioner. The main originality of this program is the lack of an abstinence requirement to proceed to the evaluation, even in the absence of alcoholic hepatitis. All patients meeting criteria for alcohol use disorder (AUD) were required to participate in relapse prevention therapy (RPT), consisting in individual sessions following a manual tailored for this program. An impressive 703 patients were referred in a 29-month period, while only 14%

(101 patients) were deemed suitable for listing and 6.3% (44 patients) were ultimately transplanted. Short-term survival was satisfactory, like the one obtained with a historic control-group of patients with a length of abstinence >6-month. Only 3 patients (6.8%) experienced relapse post-LT. Interestingly, in an analysis of relapse risk-factors including patients evaluated (receiving or not a transplant), age and Model for End-stage Liver Disease (MELD) score at listing were protective factors, while severe AUD or marital status were not statistically associated with relapse.

The findings of this work must be tempered by the very short follow-up length for ALD pilot patients, which certainly underestimates the true relapse rates. It is also a single-center experience, difficult to replicate since a significant amount of resources and institutional willingness are needed.

This outstanding study highlights the fact that the burden of relapse risk should not be borne exclusively by the patient; the transplant team has a major responsibility to prevent this risk by providing a risk reduction program. Several questions are also raised by this experience. First, since alcohol consumption in Western countries is so prevalent, should this kind of follow-up and pre-transplant evaluation be offered to all LT candidates, regardless of the etiology of the liver disease? Then, is there enough evidence to set up integrative management pre- and post-transplant as standard of care? A comparison with a longer follow-up focusing in graft and patient survival as well as overall and harmful relapse should answer this question. Finally, if the evidence becomes indisputable, are the transplant teams ready to implement such a heavy organization to ensure acceptable results?

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