

Editorial

Liver Transplantation and Alcoholic Liver Disease: A Point of View

Testino G* and Leone S

Alcoholic Regional Centre, IRCCS AOU San Martino-IST (National Institute for Research on Cancer), Italy

***Corresponding author:** Gianni Testino, Alcoholic Regional Centre, IRCCS AOU San Martino-IST (National Institute for Research on Cancer), Italy

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Alcohol-related liver cirrhosis (more or less associated with virological factors) is very frequent in hospital settings (approximately 50% of deaths in cirrhotic patients are alcohol related); however, patients suffering from Alcoholic Liver Disease (ALD) are frequently diagnosed too late [1-3] and are not included on the list for Liver Transplantation (LT). To date, ALD is the second cause of LT in Europe and the USA [4].

In 2008, in fact, the European Liver Transplant Registry stated that alcohol represents the second cause of transplants after hepatitis, and this was confirmed in 2009 by the United Network for Organ Sharing [5].

In Europe, there was an increase in alcohol-related transplants during the period 1988 to 1995 and 1996 to 2005: there was an increase in alcohol consumption from 35.8% to 41.6% and in viral hepatitis plus alcohol abuse from 4.2 to 6.6%, while we witnessed a decline in virus-related liver transplants from 45.7% to 43.8% [6].

The recent emergence of direct-acting antivirals [7] in the coming years will significantly reduce the number of LT due to HCV, and ALD will become the primary cause.

If there is a Child-Pugh score higher than 7, and/or there is the presence of a Model End Stage Liver Disease (MELD) scores higher than 14, the subject should be considered and evaluated for inclusion on the list for LT [3]. With regard to the Child-Pugh classification, Poynard, et al. [8] found that a major advantage could be achieved when replacement therapy is carried out with a score of 10-11.

Despite alcohol representing an important cause of transplantation and despite the 5-year survival data demonstrating that they are equal or even, in some cases superior to those for other causes (viral, autoimmune, by accumulation, etc.), there are still doubts in the general population and in the medical sector [3].

Some ethical issues have been raised. In particular, it is widely believed that ALD is a 'self-inflicted' disease and, therefore, the donation of an organ should only be carried out if there are absolute guarantees.

The possibility of post-transplant relapse is significantly higher for hepatitis C. Forman, et al. [9] indicated the presence of chronic

hepatitis in 75-80% of cases and fibrosis/cirrhosis in 10-21% of cases after 5 years. Alcoholic post-transplant relapse varies from 11% to 50% depending on the case studies; however, the loss of the graft occurs in fewer than 17% of cases, with a mortality rate lower than 5%.

The leading causes of post-transplant death are due to cardiovascular and neoplastic diseases.

Even if it is assumed that a short pre-abstention period before transplantation correlates with a greater number of post-transplant relapses, a safe period of abstention has not actually yet been well defined [5].

Currently, the majority of transplant centers, both in the USA and in Europe, require a minimum abstention period of about 6 months: unfortunately this 6-month wait can result in the deaths of many patients.

In patients with 'End Stage Liver Disease' (ESLD), improvement is possible within the first 3 months of abstention [10]. Subsequently, this improvement is not achievable. It is suggested, therefore, that a 3-month abstention period should be sufficient.

Acute Alcoholic Hepatitis (AAH) is a condition characterized by a wide spectrum of signs and symptoms ranging from jaundice asymptomatic to more severe forms characterized by a combination of encephalopathy, fever, asthenia, coagulopathy and Leucocytosis.

It can occur within a framework of not advanced chronic liver disease or overlap with a frankly cirrhotic framework (acute or chronic liver failure), causing decompensation or dramatically aggravating the clinical picture. 20% of patients with ALD undergoing a biopsy are carriers of (AAH) and 10% to 35% of hospitalized patients are also carriers.

The less severe forms (mild to moderate) can regress with abstention, while severe forms (MELD > 21) have a poor prognosis with mortality at 1 month in approximately 35% to 40% of cases, and in 6 months in about 70% of cases [11].

Therapy is generically characterized by antioxidant drugs and adequate nutrition.

Steroid therapy is used in severe forms if there are no contraindications such as bleeding, kidney failure, and infections. In cases of no response to medical treatment there is a 28-day mortality rate in about 80% of cases [12].

Replacement Therapy (LT) is not indicated by most authors for the presence of alcohol consumption during the active phase. However, it has been shown that LT gives excellent results in these cases.

After 2 years there is a survival rate of 71% in the transplanted

group compared with 23% in the control group, who did not receive the transplant [13].

In light of the data provided, the pre-transplant abstinence period cannot be the only parameter to be considered. In the course of ESLD and (AAH) LT can and must be proposed in cases of short periods of abstinence [14].

A 'risk score' should be created for the evaluation of patients suffering from ALD [4].

In addition, in hospitals where there are units that deal with alcohol-related diseases or hepatologists with skills in alcohol-related diseases the approach to patients with alcohol-related 'End Stage Liver Disease' or to (AAH) is certainly clearer. It has been proven that the presence of alcoholologists on a multidisciplinary team guarantees a successful long-term transplant, regardless of the period of pre-transplant abstinence [15].

Our proposal is, therefore, the following [4]:

1. In cases of decompensated liver cirrhosis with a MELD of <19 a 6-month period of abstinence can be accepted;
2. In cases of rapidly progressive hepatic cirrhosis with a MELD higher than 19 a 3-month period of abstinence is sufficient;
3. In cases of (AAH) non-responders to medical steroid therapy, in selected patients LT may be proposed independently of the period of sobriety;
4. The transplant team must have a specialist in substance addiction;
5. During the post-transplant period close monitoring for cancer and cardio-vascular problems must be carried out.

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