

ALF and Liver transplant: management and mortality before and after the application of an 'ALF treatment protocol'. The experience of the Intensive Care Unit of Dipartimento Trapianti d'Organo (Policlinico Umberto I di Roma) between January 2006 and December 2017.

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Argomento: Altro

Introduction: Acute Liver Failure (ALF) describes patients with an acute episode of liver dysfunction or its developing. ALF features are: deterioration in liver function tests and potential association with organs dysfunction. ALF is a specific and rare syndrome associated with development of coagulopathy and altered levels of consciousness due to hepatic encephalopathy (HE).

The aim of this retrospective study is to evaluate the incidence and etiology of ALF in patients treated in the Intensive Care Unit of Dipartimento Trapianti d'Organo (Policlinico Umberto I di Roma) between January 2006 and December 2017. We focused on the differences before and after the introduction of the 'ALF patient treatment policy' as a protocol in 2013.

Methods: We enrolled patients with ALF diagnosis between January 2006 and December 2017 (N= 67) selected according to King's College criteria.

We analysed:

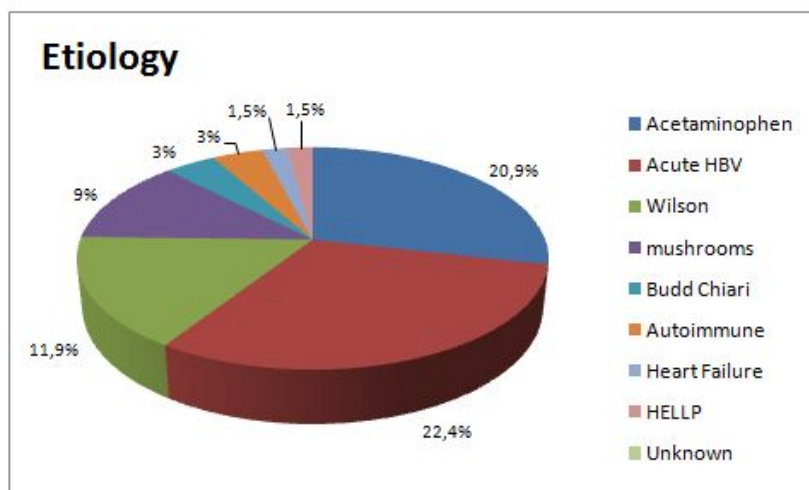
- Etiology
- Regional provenance
- Time from symptoms occurrence to ICU admission
- Liver transplants
- Mortality rates

Results: We studied 67 patients. ALF causes reflected international data, with prevalence of acetaminophen toxicity (20,9%) and unknown diagnosis (23,8%). Interesting is the difference between before and after the application of 'ALF patients treatment policy' with a drop in general mortality (37% to 25%). Transplant associated mortality rates went from 41.67% to 10%. Patients that did not receive a requested liver transplant showed the highest mortality rate (90.9%, 10/11 patients). Territorial origin showed the prominence of Lazio (58.2%,). (Table 1)

Conclusions: ALF is a rare but extremely severe condition. The chance of survival is linked to fast

recognition and referral to a Liver Transplant Centre for immediate evaluation and possible urgent transplant. Our study highlighted the differences between the application of a protocol for treatment and its absence. The rapid allocation of the organ has also proved to be a life-saver intervention, even in the most severe cases.

Table 1



Comparison between mortality rates before and after the application of the 'ALF patients treatment policy'

	Before Tot.N= 27	2013	After Tot N=40
Mortality tot.	37% N= 10		25% N= 10
Mortality after transplant	41,67% N= 5/12		10% N= 1/10
Mortality in non transplanted pts	33,3% N= 5/15		30% N= 9/30