

# Hepatic Failure

- **Acute liver failure** - life-threatening failure of liver functions (synthetic, biotransformation) occurring within 8 weeks of the first symptoms, the main feature being hepatic encephalopathy.
- **Chronic liver failure** - gradual development of symptoms.

## Causes

The most common causes of acute failure:

1. viral hepatitis (so-called fulminant) – especially VHA, VHB;
2. intoxication with drugs (paracetamol, halothane) or toxic substances (mushroom poisoning, drugs – ecstasy);
3. metabolic disorders (Wilson's disease, Reye's syndrome);
4. venostasis (acute Budd-Chiari syndrome, shock, P failure).

**The cause is massive necrosis of hepatocytes.**

The cause of chronic liver failure is liver cirrhosis (most often alcoholic), liver tumors and liver metastases

## Clinical Manifestations

- vague symptoms (nausea, weakness, nausea, abdominal pain, ...), later icterus, bleeding manifestations, infectious complications, metabolic complications (ABR and electrolyte disorders, hypoglycaemia);
- a clinically decisive sign of liver failure is a qualitative and quantitative impairment of consciousness - hepatic encephalopathy and cerebral edema (vasogenic and cytotoxic - the main cause of death in ALF).
- Chronic liver failure is manifested by a slower onset of hepatic encephalopathy with typical tremor and the development of portal hypertension.



Icterus

## Diagnostics

- Laboratory examination – hyperbilirubinemia, ↑ AST and ALT, prolongation of PT, hypoglycemia, hyperammonemia.
- Imaging methods - on CT brain edema, best to monitor intracranial pressure (ICP).

## Treatment

- causally possible only in paracetamol poisoning (N-acetylcysteine), in green toadstool poisoning, activated charcoal is administered, forced diuresis is performed, and silybin and G-PNC are administered;
- broad-spectrum ATB;
- treatment of coagulopathy – frozen plasma (replacement of coagulation factors), vitamin K;
- antiulcer drugs;
- modification of the internal environment;
- treatment of hypoglycaemia – glucose infusion;
- treatment of hepatic encephalopathy (diet, lactulose, ATB);
- treatment of cerebral edema – elevated head position, diuretics (mannitol, furosemide), controlled hyperventilation, barbiturates;
- treatment of arrhythmias (arising due to ABR disorders), possible hypotension is treated with catecholamines;
- treatment of renal failure – discontinuation of nephrotoxic drugs, continuous elimination methods;
- in case of severe liver failure only liver transplantation possible.

## Links

### Related Articles

- Hepatic failure (pediatrics)
- Liver function tests
- Hepatitis

### References

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2010]. <<http://langenbeck.webs.com>>.

