

EXTRACORPOREAL BLOOD PURIFICATION THERAPY WITH CYTOSORB™ FOR SEVERE HYPERBILIRUBINEMIA AND JAUNDICE IN DRUG-INDUCED LIVER INJURY

Diena Davide, Inguaggiato Paola, Daidola Germana, Gigliola Graziella, Loi Maria Rita, Besso Luca
Nephrology and Dialysis unit – AO S.Croce e Carle – Cuneo, Italy

Background

- **Drug-induced liver injuries (DILIs)** are a group of multiform hepatic injuries related to a specific drug assumption.
- Cholestatic **DILI** is characterized by disproportionate elevation of alkaline phosphatase compared with aminotransferases and severe elevation of serum bilirubin
- **Androgenic steroids** are a known cause of DILI.

Conclusions

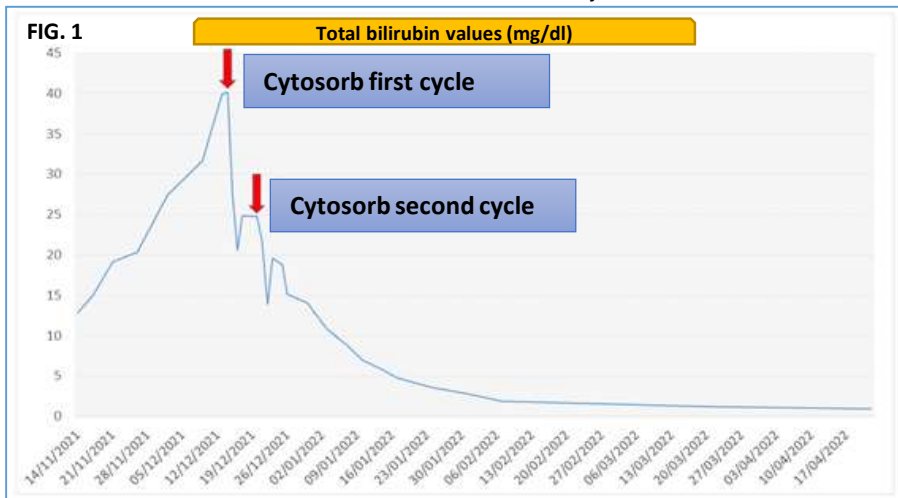
- **EBPT with Cytosorb™** demonstrated efficient in **bilirubin removal** in a case of severe isolated hyperbilirubinemia due to toxic hepatitis caused by androgenic steroids.
- The use of **EBPT without acute kidney injury** is **controversial** and should be carefully evaluated by a multidisciplinary assessment.
- In the present case **EBPT** was considered as a **support bridge therapy** in the lacking of trapiantologic indications and after the identification and elimination of causative drug.

Bibliography

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Case presentation

- ♂, 46 years old, no comorbidities.
- **Jaundice**, liver enzymes 1.5 x upper normal limit, alkaline phosphatase 3 x upper normal limit and **severe mixed hyperbilirubinemia** (12.5 mg/dl).
- Normal blood count, coagulation, haemolysis, ferritin, cupremia. Viral, other infectious, neoplastic or immunologic causes excluded.
- CT and MR scan with no focal abnormalities and no biliopancreatic disease.
- **Liver biopsy** with evidence of focal severe cytoplasmic and intracanalicular cholestasis with limited focal hepatocyte necrosis. **Hypotesis of toxic hepatitis.**
- Regular assumption of **anabolizing drugs** (androgenic steroids) in the previous weeks for weight training and muscle bulk. **Diagnosis of DILI.**
- Progressive **increase in total bilirubin levels up to 40 mg/dl** without other organ disfunctions. No improvement with conservative therapy.
- Indication to **extracorporeal blood purification therapy (EBPT)** with regional **citrate anticoagulation** in association with a sorbent cartridge (**Cytosorb™**).
- First cycle of 72 hours (cartridge change every 24 hours) with 50% reduction in bilirubine values. After a week second cycle of treatment of 24 hours.
- No circuits clotting or other complications.
- Good response on bilirubin values (**Fig.1**). **After five months** patient in good clinical condition without jaundice and with **normal bilirubin**



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SPECIAL EDITION

June 14-16, 2022