HEMOPERFUSION IN ECMO CIRCUIT FOR HYPERBILIRUBINEMIA - A CASE REPORT

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Background: Acute development of hepatic dysfunction with increase in bilirubin ,altered coagulation and altered cerebral mentation is common in patients who have been revived after acute circulatory arrest with or without ECMO. There has been a rapid development of wide range of artificial liver support systems. Hemoperfusion with BS 330 can provide temporary and effective removal of bilirubin and bile acids.

Case Presentation: 42 year old gentleman with decompensated heart failure, awaiting heart transplant had a cardiac arrest. He was put on VA ECMO and later underwent permanent LVAD. His right heart needed a temporary VAD support. He had bad lungs(sepsis and congestion) hence oxygenator was incorporated into the RVAD. His bilirubin shot up on 4th postoperative day and continued to raise. Three cycles of hemadsorption was done incorporating the BS330 filter in the ECMO circuit. His bilirubin was 26 on day 1 and reduced to 16 by day 5 and after completion of three cycles.

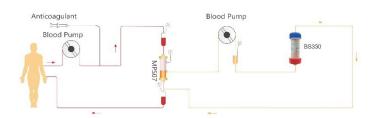


Fig1: BS330 Treatment

Conclusion: BS 330 with anion exchange resin specifically absorbs bilirubin and bile acids.

- ✓ Simple, feasible and compatible for incorporation into ECMO/CRRT circuit.
- ✓ Significant reduction in total bilirubin levels.
- ✓ No complications attributable to specific filter incorporation.

