

Hemolytic Uremic Syndrome and CRRT. First Case In Our Institution

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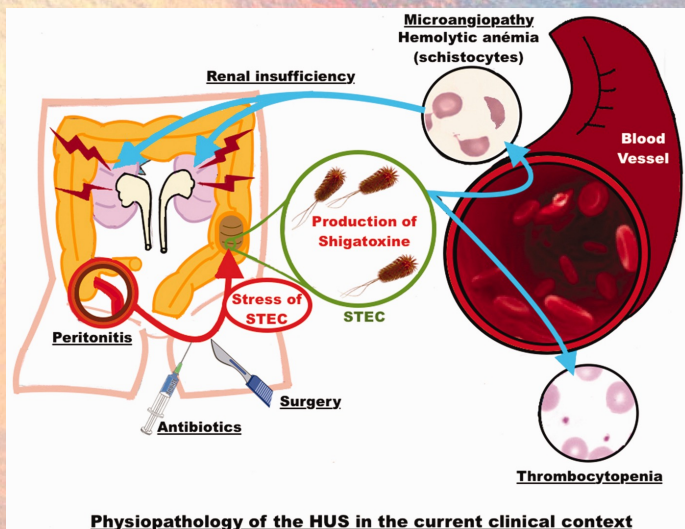
- 1 Hemolytic Uremic Syndrome (HUS)
Hemolysing U-rainbow Anemone
- 2 Children
Children
- PATHOPHYSIOLOGY
- 3 Preceded by Acute Diarrheal Illness
- 4 Endothelial Damage
Inner-layer Damaged
- CLASSIC TRIAD OF SYMPTOMS
- 5 Microangiopathic Hemolytic Anemia (MAHA)
- 6 Thrombocytopenia
- 7 Renal Failure
Dead Kidney
- LABS
- 8 Helmet cells
Helmet Cell
- 9 LDH
- TREATMENT
- 10 Dialysis
Dial-machine
- 11 Supportive

Background

Hemolytic uremic syndrome (HUS) is characterized by the classic triad of microangiopathic hemolytic anemia, thrombocytopenia, and acute renal failure. More than 90% of the cases occur after an infectious process caused by strains of Escherichia coli, which produce the Shiga-like toxin.

Case description

2 years old girl with an initial weight of 10 kg, presented in the hospital and was diagnosed with Idiopathic HUS. Lab tests showed severe anemia Hb 5mg/dl, PLT(15,000 / mm³), hypertensive state, and anuria. Treated initially with furosemide, nitroglycerin for hypertension, blood, and platelet transfusion, she gained weight until 14 kg. Despite the onset of intermittent dialysis, the clinical situation did not improve.



CVVHD was started with these parameters:

BP	50 ml /hour
PBP	50ml/hour
Dialysate	400 ml/hour
PFR	40 ml/hour in first two days 80 ml in remaining days
Everyday weight loss	400mg
Hemodynamic parameters were stabilized	
Hb	8mg/dl
PLT	100. 000 mm ³

Baxter Prismaflex HF 20 set was used. The patient was maintained for 8 days in CVVHD. The filter was changed one more time (after 96 hours). On the 13th day, the urine output improved (2ml/kg/hour) and CVVHD was interrupted. The patient was discharged to the nephrology ward for further treatment. She left the hospital after 30 days with normal renal parameters.



Conclusion

The success of this treatment is related to the use of CVVHD since through it, it was possible to a better management of the fluid balance and prevent the dialysis disequilibrium syndrome.