



The MIGHTY MEDIC
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and Therapeutic Apheresis 2017

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HYPERTRIGLYCERIDEMIA EXTRACORPOREAL TREATMENT

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Case Report

A 45 year-old male (ROMANIA) presented to the emergency department complaining upper abdominal pain, diffuse ich and gonorrhoea infection

Medical history (2011) evidenced events of acute pancreatitis

Case Report

Amilase	8	U/l	(n.v.)	25-125)
Lipase	628	U/L	(n.v.)	8-78)
Blood glucose testing	>800	mg/dl	(n.v.)	70-110)
Hb	15.3	g/dl	(n.v.)	13-18)
Hct	42%		(n.v.)	42-52)
Creatinine	0.70		(n.v.)	0.50-1,50)
WBC	16.64	(n.v.)	4-10	x 10 ³ /uL)
LDH	378	U/L	(n.v.)	313-618)
AST	29	U/L	(v.n.)	5-34)
ALT	52	U/L	(v.n.)	5-55)
Sodium	130	/L	(v.n.)	136-145)
K	5.5	mmol/L	(v.n. 5.5)	

Case Report

CT scan

Pancreatitis with diffuse edema

Hepatomegaly

Cholesterol 1026 mg/dl (v.n. 120-220)

Triglyceride 8230 mg/dl (v.n. 50-180)

Diagnosis: Acute Pancreatitis

Therapy at the beginning in the Emergency department

→ Gastroenterology Unit

Fasting

Medical treatment of pain and ich

Antibiotics

Massive Fluid therapy

Novorapid Flexpen

Cholesterol 1611 mg/dl (v.n. 120-220)

Triglyceride 24000 mg/dl (v.n. 50-180)

APHERESIS 18/02

COBE SPECTRA

Hypertriglyceridemic pancreatitis

TPE

III

2C 237

GASTROENTEROLOGY UNIT

HT 38%, W 50 Kg, High 1.66, Blood volume 3888 ml, PA 120/80 Fc 70 r

%TPV: 1

Treated volume: 4802 ml

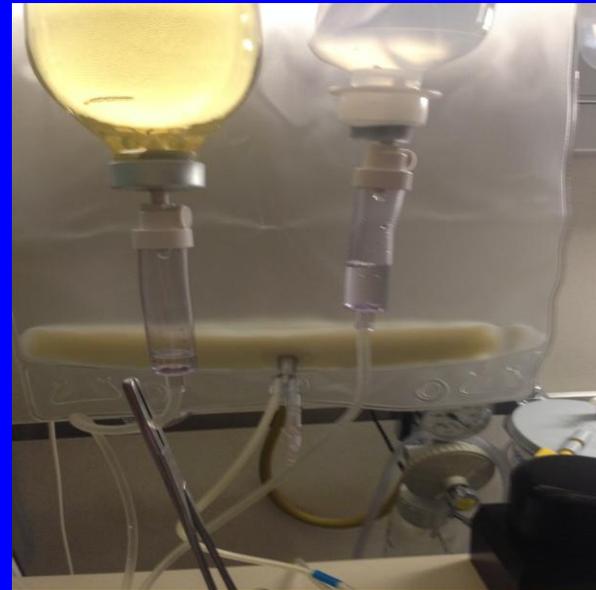
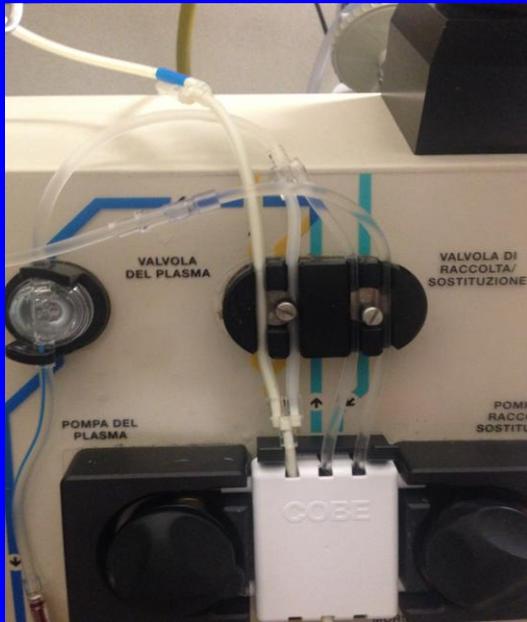
Removed: 2336 ml

Replacement fluid: 2000 ml Serume Albumin – 343 ml ACD-A

Before Apheresis: heparin 5000 UI intravenous as a bolus

Start at 22.30 p.m End at 00.40 p.m.

Trigliceryde: 4927 mg/dl, Cholesterol 601 mg/ dL



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APHERESIS 19/02

COBE SPECTRA

Hypertriglyceridemic pancreatitis

TPE

III

2C 237

GASTROENTEROLOGY UNIT

HT 43%, W 50 Kg, High 1.66, Blood volume 3888 ml, PA 117/71 Fc 68 r

%TPV: 1

Treated volume: 5595 ml

Removed: 2352 ml

Replacement fluid: 2000 ml Serume Albumin – 399 ml ACD-A

Before Apheresis: heparin 5000 UI intravenous as a bolus

Start at 12.40 p.m End at 15.15 p.m.

Trigliceryde: 496 mg/dl, Cholesterol 203 mg/ dL

21/02 (2days after)

Hb 13.8

RBC 4.3

Ht 40%

WBC 6.70 (N78%)

Sodium 132 mmol/L

Amylase 12 U/L

CPR 15.69 mg/dl

Glucose 456 mg/dl

Cholesterol 263 mg/dL

Triglyceride 1164 mg/dl

22/02 (3days after)

Hb 13.8

RBC 4.3

Ht 40%

WBC 6.70 (N78%)

Sodium 132 mmol/L

Amylase 12 U/L

CPR 15.69 mg/dl

Glucose 456 mg/dl

Cholesterol 263 mg/dL

Triglyceride 1164 mg/dl

24/02 (5days after)

Hb 11.7 g/dl

RBC $3.7 \cdot 10^6$

Ht 34%

WBC 6.48 (N62%)

Sodium 135 mmol/L

HbA1c 148.1 mmol/mol (v.n. 20.0 – 42.0)

Cholesterol 267 mg/dL

Triglyceride 1008 mg/dl

28/02 (8days after)

Hb 10.8 g/dl

RBC $3.3 \cdot 10^6$

Ht 30%

WBC 8.59 (N73%)

Sodium 132 mmol/L

Cholesterol 369 mg/dL (v.n. 120-220)

Triglyceride 1979 mg/dl (v.n. 50-180)

APHERESIS 01/03

COBE SPECTRA

Hypertriglyceridemic pancreatitis

TPE

III

2C 237

GASTROENTEROLOGY UNIT

HT 30%, W 50 Kg, High 1.66, Blood volume 3888 ml, PA 100/70 Fc 72 r

%TPV: 1

Treated volume: 5158 ml

Removed: 2917 ml

Replacement fluid: 2500 ml Serume Albumin – 368 ml ACD-A

Before Apheresis: heparin 5000 UI intravenous as a bolus

Start at 16.40 p.m End at 19.00 p.m.

Trigliceryde: 757 mg/dl, Cholesterol 369 mg/ dL

PATIENT RESIGNED !!!!!

12/04

Hb 11.7 g/dl
RBC 3.7 10⁶
Ht 34%
WBC 6.48 (N62%)
Sodium 126 mmol/L
Glucose 578 mg/dl
AST 4027 U/L
ALT 1412 U/L
LDH 3360 U/L
Amylase 19 U/L
Lipase 120 U/L
Ammonia 130 umol/L

Cholesterol 267 mg/dL
Triglyceride 1813 mg/dl

APHERESIS 12/04

COBE SPECTRA

Hypertriglyceridemic pancreatitis

TPE

III

2C 237

GASTROENTEROLOGY UNIT

HT 33%, W 58 Kg, High 1.66, Blood volume 4115 ml, PA 131/85 Fc 76 r

%TPV: 1

Treated volume: 4502 ml

Removed: 2454 ml

Replacement fluid: 2000 ml Serume Albumin – 323 ml ACD-A

Before Apheresis: heparin 5000 UI intravenous as a bolus

Start at 16.10 p.m End at 17.35 p.m.

Trigliceryde: ?, Cholesterol ?

CONCLUSION

Plasmapheresis may represents an effective therapy technique for rapidly lowering triglyceride levels and to treat acute pancreatitis

COMING SOON ??

SIMT AZIENDA OSPEDALIERA SANT'ANDREA UNIVERSITA' DI ROMA LA
SAPIENZA

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Ida Casorelli
Umberto Paladini
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Roberta Tomao
Paolo Paesano

Thank you for your attention