44° CONVEGNO NAZIONALE di Studi di Medicina Trasfusionale
Rimini | Palacongressi, 3-5 maggio 2022
SIMTI

AFERESI TERAPEUTICA IN URGENZA

CRITERI ORGANIZZATIVI, EVIDENZE DISPONIBILI E MODELLI PERSEGUIBILI

REGIONE DEL VENETO
Azienda Ospedale Università Padova

Piero Marson

U.O.C. Immunotrasfusionale

Azienda Ospedale Università di Padova

IMMUNOTRASFUSIONALE DI PADOVA
SIT PD

Il sottoscritto dott. PIERO MARSON, in qualità di Relatore,

dichiara:

nell'esercizio della Sua funzione e per l'evento in oggetto, NON SONO in alcun modo portatore di interessi commerciali propri o di terzi; e che gli eventuali rapporti avuti negli ultimi due anni con soggetti portatori di interessi commerciali non sono tali da permettere a tali soggetti di influenzare le sue funzioni al fine di trarne vantaggio.

4 maggio 2022

Transfusion and Apheresis Science 57 (2018) 339–341

Contents lists available at ScienceDirect

Transfusion and Apheresis Science

journal homepage: www.elsevier.com/locate/transci

Review

Pediatric apheresis emergencies and urgencies: An update

Cesare Perotti[a,*], Jerard Seghatchian[b], Claudia Del Fante[a]

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Transfusion and Apheresis Science 58 (2019) 237–246

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Therapeutic plasma exchange – A brief review of indications, urgency, schedule, and technical aspects

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Transfusion and Apheresis Science 59 (2020) 102991

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Transfusion and Apheresis Science

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Urgent therapeutic plasma exchange

Samir Saheb *, Antonio Gallo

Unité d'hémobiothérapie, APHP, Sorbonne Université, Hôpital De La Pitié-Salpêtrière, Paris, France

Blood Transfus 2011;9:356-61 DOI 10.2450/2011.0093-10

EDITORIAL

Urgent plasma exchange: how, where and when

Gianpaolo Russi[1], Piero Marson[2]

[1]Transfusion Medicine Section, Hospital of Reggio Emilia, Reggio Emilia; [2]Immunotransfusion Section, University Hospital of Padova, Padoa, Italy

ATTIVITA' UNITA' DI AFERESI TERAPEUTICA
DIPARTIMENTO TRASFUSIONALE PROVINCIALE DI PADOVA

N° PROCEDURE	2017	2018	2019	2020	2021
Scambio plasmatico	**1.247**	**1.266**	**1.120**	**822**	**738**
Scambio eritrocitario	**81**	**80**	**92**	**83**	**92**
Aferesi lipoproteica	171	189	210	230	379
Granulocito-monocitoaferesi su colonna	111	82	95	77	46
Immunoadsorbimento	16	36	79	7	7
Leucaferesi citoriduttiva	**3**	**13**	**5**	**7**	**5**
Fotochemioterapia extracorporea	346	341	263	185	270
Leucaferesi produttiva/altre leucaferesi	6	1	19	1	2
Staminoaferesi per uso autologo	96	112	114	110	98
Staminoaferesi per uso allogenico	9	14	9	16	12
N° totale	**2.086**	**2.134**	**2.006**	**1.538**	**1.655**

URGENZE/EMERGENZE < 5%

URGENZA/EMERGENZA IN AFERESI TERAPEUTICA

- Non ancora stabilita (6 ore? 8 ore? entro 12 ore?)
- Acronimo ASAP (*as soon as possible*): generico e arbitrario

3 In view of the high risk of preventable, early deaths in TTP, treatment with PEX should be initiated as soon as possible, preferably within 4–8 h, regardless of the time of day at presentation, if a patient presents with a MAHA and thrombocytopenia in the absence of any other identifiable clinical cause (1B).

British Journal of Haematology, 2012, **158**, 323–335

The sub-committee did feel that diseases that should be treated emergently, that is, in the middle of the night if warranted, are thrombocytopenic thrombotic purpura, acute chest syndrome in sickle cell disease, thrombocytosis, hyperleukocytosis, hyperviscosity, and malaria.

ASFA
American Society for Apheresis

2010 GUIDELINES

HOW I TREAT HYPERLEUKOCYTOSIS IN AML

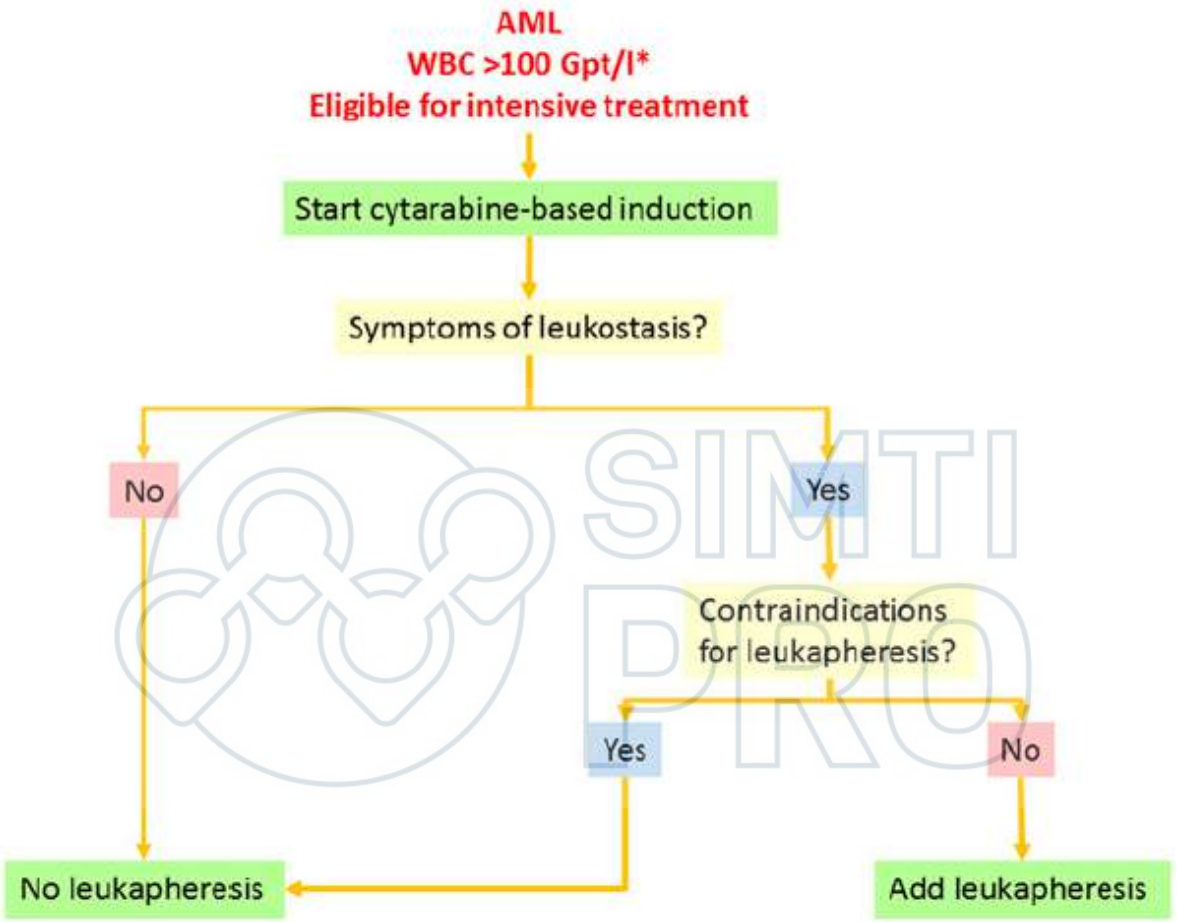
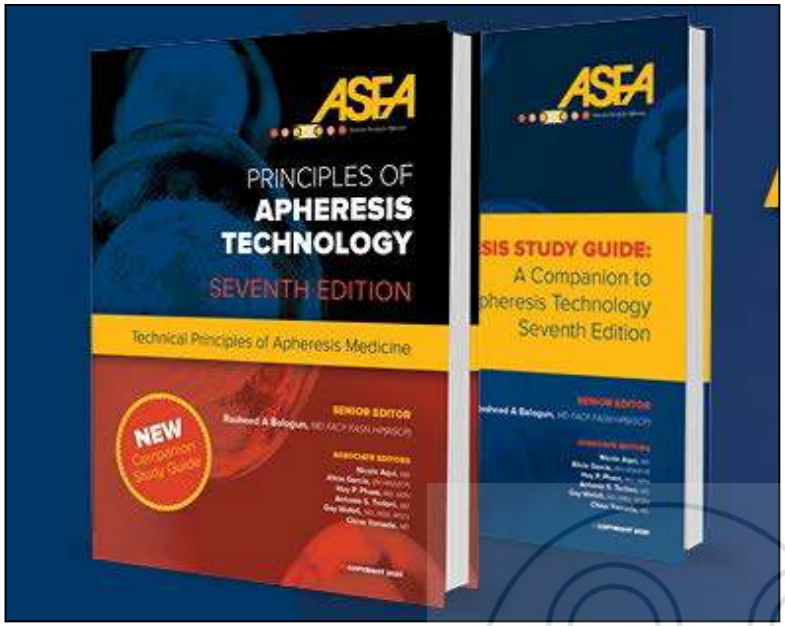


Figure 5. Treatment algorithm for AML with hyperleukocytosis. Supportive therapy such as hydration, prophylaxis of TLS, and anti-infective treatment is necessary for all patients. The asterisk indicates that the algorithm also applies to patients with leukocytosis <100 Gpt/L who present with symptoms suggestive for leukostasis.

BLOOD, 21 MAY 2015 • VOLUME 125, NUMBER 21



- **Why do the ASFA guidelines not specify whether a procedure should be done in the middle of the the night or can wait until the morning?**
- **The ASFA guidelines committee specifically decided not to include a comment on whether procedures should be done immediately or could wait because this will vary between patients with a given disorder.**
- **An apheresis procedure to be done emergently, urgently, or routinely depends upon the clinical presentation of the patient, the available resources (e.g., personnel and equipment) to perform the procedure, and other available treatmente options.**

Disease Characteristics	Consequences of Delay
Not immediately «life or limb» threatening	No permanent harm
Chronic conditions where there is slow progression of the disease	No rapid deterioration of patient's conditions
Long delay between initiation of apheresis therapy and response of treatment	None, treatment will not immediately reverse disease process

Duccio di Buoninsegna
Museo dell'Opera del Duomo, Siena (1308-11)

Thrombosis Research 193 (2020) 53–59

Contents lists available at ScienceDirect

Thrombosis Research

journal homepage: www.elsevier.com/locate/thromres

Full Length Article

Time from suspected thrombotic thrombocytopenic purpura to initiation of plasma exchange and impact on survival: A 10-year provincial retrospective cohort study

Daniel Sawler[a], Arabesque Parker[a,b], Joanne Britto[c], M. Dawn Goodyear[d,1], Haowei L. Sun[a,*,1]

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[b] Department of Critical Care, University of Alberta, Edmonton, Canada
[c] Department of Medicine, University of Calgary, Calgary, Canada
[d] Division of Hematology, Department of Medicine, University of Calgary, Calgary, Canada

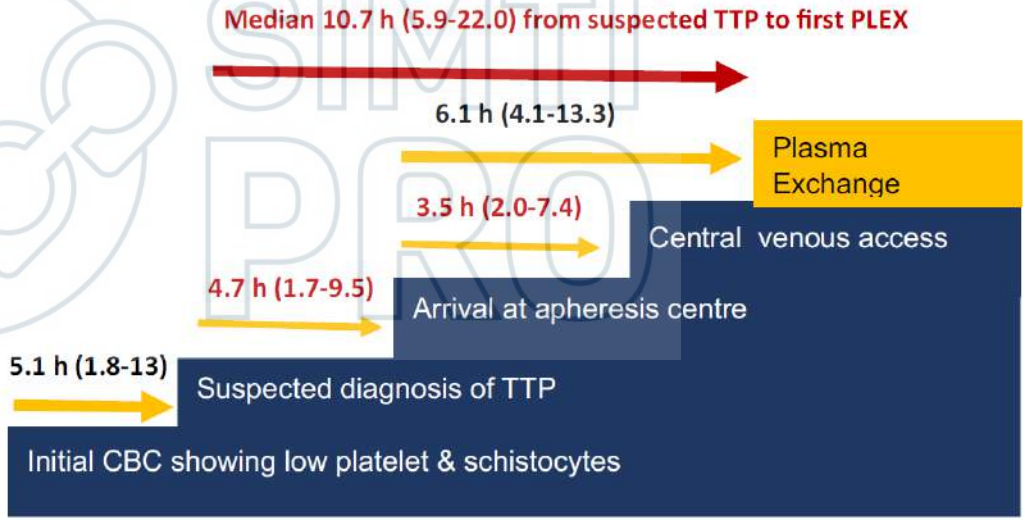


Fig. 2. Value stream map for time from suspected TTP diagnosis to initiation of plasma exchange (median, IQR).
CBC, complete blood count; h, hours; IQR, interquartile range; PLEX, plasma exchange; TTP, thrombotic thrombocytopenic purpura.

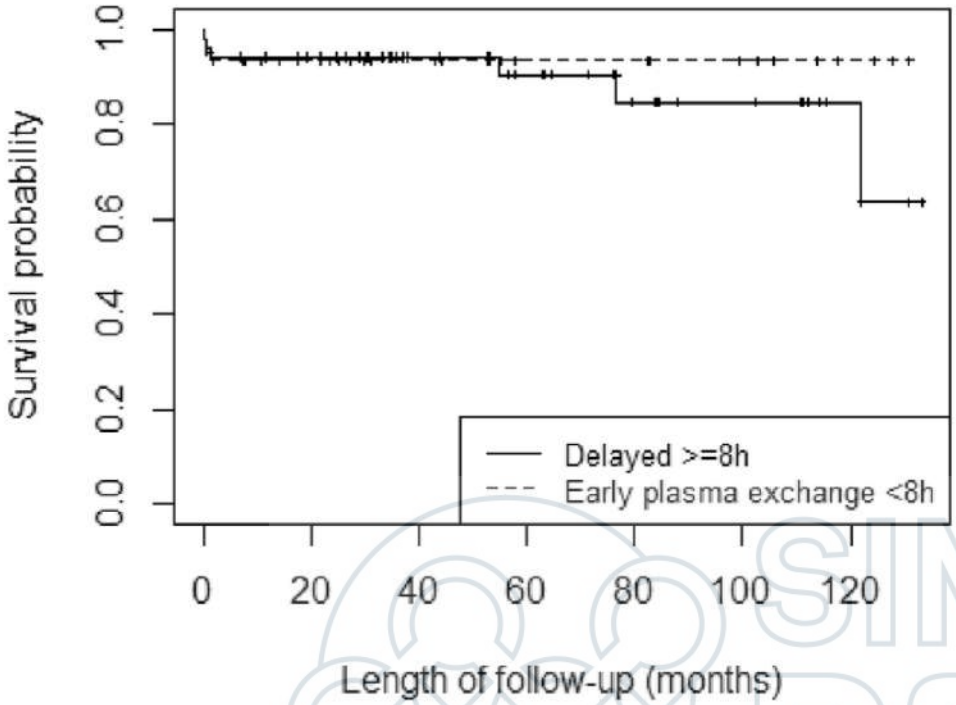


Fig. 4. Kaplan-Meier survival curves in confirmed TTP cases, stratified by early (< 8 h) or delayed (≥ 8 h) initiation of plasma exchange from time of suspected diagnosis.

In conclusion, while our provincial TTP mortality rate is in keeping with published literature, we report a significant delay in the initiation of plasma exchange beyond the recommended 4–8 hour window in a real-world setting. Delays > 24 h was associated with a clinically significantly higher risk of death and thrombotic complications, albeit not statistically significant likely due to type II error and confounding.

Linea guida pubblicata nel Sistema Nazionale Linee Guida

Roma, 20 settembre 2021

L'utilizzo della sola terapia plasmatica può essere adottato come misura temporanea in attesa dell'esecuzione del PE ma non è da considerarsi in nessun caso sostitutivo del PE. L'infusione plasmatica non rimuove l'inibitore di ADAMTS13 e il volume plasmatico somministrabile è significativamente inferiore alla quantità di plasma erogabile come liquido di sostituzione del PE.

PROCEDURA DI DESENSIBILIZZAZIONE IN PAZIENTE CANDIDATO A TRAPIANTO DI RENE DA DONATORE VIVENTE ABO INCOMPATIBILE

DONATORE: S.S. (gruppo sanguigno A POSITIVO)
RICEVENTE: M.F. (gruppo sanguigno 0 POSITIVO)

Titolo isoemoagglutinine anti B → 1:64 (09/07/2021), ripete il giorno 04/04/22

Procedure

Venerdì 04/04/2022
Giorno -32: Ripetizione Crossmatch (in nefrologia)
Prelievo venoso per dosaggio isoemoagglutinine
Visita Medicina trasfusionale (ore 9:00)
Accesso ambulatoriale per infusione sostanze profilattiche (Infusione Rituximab)

Giovedì 28/04/2022
Giorno – 8: RICOVERO. Accertamenti pre operatori, prelievo venoso per dosaggio isoemoagglutinine pre e post plasmaferesi e livelli ematici di Tacrolimus
1^ seduta di plasmaferesi e infusione di Cytotect 150 mL
Seduta di emodialisi nel pomeriggio
Advagraf secondo dosaggio domiciliare
Myfortic 720 mg + 720 mg

Venerdì 29/04/2022
Giorno – 7: Prelievo venoso per: Dosaggio isoemoagglutinine pre e post plasmaferesi e dosaggio dei livelli ematici di Tacrolimus
Advagraf secondo livelli ematici
Myfortic 720 mg + 720 mg

Sabato 30/04/2022
Giorno – 6: Prelievo venoso per: Dosaggio isoemoagglutinine pre e post plasmaferesi e dei livelli ematici di Tacrolimus
2^ seduta di plasmaferesi e infusione di Cytotect 150 mL
Seduta di emodialisi nel pomeriggio
Advagraf secondo livelli ematici
Myfortic 720 mg + 720 mg

Domenica 01/05/2022
Giorno – 5: Prelievo venoso per: Dosaggio isoemoagglutinine e dei livelli ematici di Tacrolimus
Advagraf secondo livelli ematici
Myfortic 720 mg + 720 mg

Lunedì 02/05/2022
Giorno – 4: Prelievo venoso per: Dosaggio isoemoagglutinine pre e post plasmaferesi e dei livelli ematici di Tacrolimus
3^ seduta di plasmaferesi e infusione di Cytotect 150 mL
Advagraf secondo livelli ematici

PEDIATRIC APHERESIS EMERGENCIES AND URGENCIES

(Perotti et al, 2018)

- ❑ AML/ALL hyperleukocytosis
- ❑ SCD, acute crisis
- ❑ Malaria, severe
- ❑ Acute inflammatory demyelinating polyradiculoneuropathy
- ❑ Extreme hypertriglyceridemia
- ❑ Poisoning and overdose

10. Peripheral blood stem cell (PBSC) collection

Lastly, we want to include in the category of urgency/emergency a particular clinical situation like stem cell collection for auto-transplantation. It is generally never a real urgency but it could become when an unexpected mobilization during weekend or feast days imposes the prompt execution of the collection without any delay, considering the fleetingness of the stem cell mobilization. In our experience the place to perform the procedure is ward.

Pediatr Blood Cancer 2005;45:344–346

BRIEF REPORT
A Case of Vinblastine Overdose Managed With Plasma Exchange

Monica Spiller, MD,[1] Piero Marson, MD,[2] Giorgio Perilongo, MD,[1] Maria Farina, MD,[3] Modesto Carli, MD,[1] and Gianni Bisogno, MD, PhD[1]*

Severe, life-threatening toxicity may be caused by errors in chemotherapy administration. To contribute with some useful information on drug-induced toxic effects and salvage therapy, we report a case of vinblastine (VBL) overdose (25 mg/m^2) in a 12-year-old child affected by an end-stage metastatic primitive neuroectodermal tumor. Early signs of toxicity were acute, severe musculoskeletal pain and fever. This was followed by intestinal hypotonia, severe esophagitis, and peripheral neuropathy. Two consecutive plasma exchange procedures were performed at 4 and 18 hr after the administration of the overdose of VBL. The overall toxicity this child experienced was much less severe than expected; this finding, in combination with the known pharmacokinectis data of VBL in children, made us hypothesize that plasma exchange might have had a role in lowering the side effects of drug over dosage. Pediatr Blood Cancer 2005;45:344–346.

Key words: overdose; plasma-exchange; vinblastine

Nicola, anni 12, PNET disseminato (2004)

- **vinblastina (al posto di vinorelbina) 24 mg (dose max 12,5 mg)**
- **dolore muscolare resistente alla morfina**
- **2 sedute PEx in giorni consecutivi (*la prima in emergenza*)**
- **rapido miglioramento sintomatologia dolorosa**

Received: 10 December 2019 | Revised: 14 July 2020 | Accepted: 16 July 2020
DOI: 10.1002/jca.21823

RESEARCH ARTICLE

Journal of Clinical Apheresis ... ASFA WILEY

Process mapping of the urgent red cell exchange procedure for patients with severe complications of sickle cell disease at a centralized hemapheresis service

Jacob A. Smith[1] | Jansen N. Seheult[1,2] | Joan Sevcik[2] | Joseph E. Kiss[2,3] | Alesia Kaplan[1,2]

Received: 13 January 2021 | Revised: 12 March 2021 | Accepted: 12 April 2021
DOI: 10.1002/jca.21916

RESEARCH ARTICLE

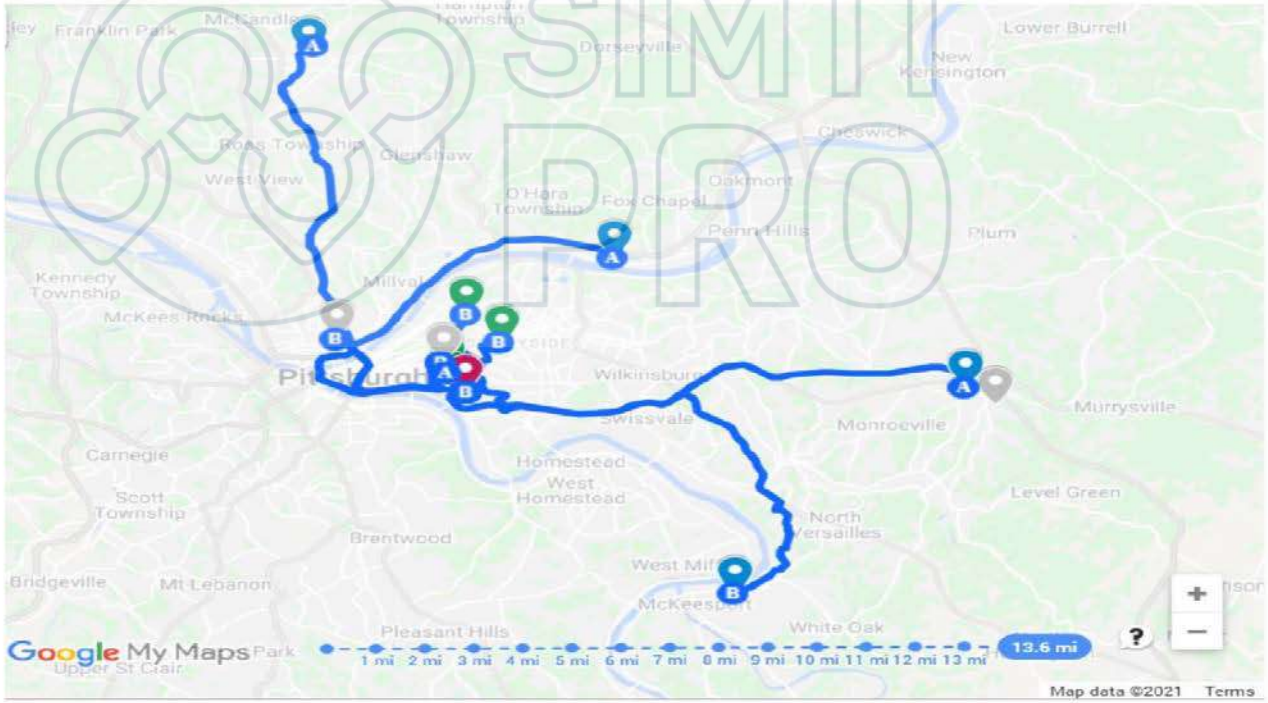
Journal of Clinical Apheresis ... ASFA WILEY

Benchmarking the centralized urgent plasma exchange service for patients admitted with a diagnosis of suspected acquired thrombotic thrombocytopenic purpura at a large healthcare system

Jansen N. Seheult[1,2] | Michelle N. Stram[3] | Joan Sevcik[2] | Alesia Kaplan[1,2] | Joseph E. Kiss[2,4]

vitalant®
Blood Donation

Figure S1: Geospatial distribution of central (green markers) and peripheral (blue markers) hospitals in a single, large healthcare system included in this study, along with the apheresis service headquarters (red marker). The three grey markers represent hospitals that are not associated with the above-mentioned healthcare system but also served by the centralized apheresis service; procedures performed at these three locations were not analyzed in this study.



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Center Information:

Therapeutic Procedure Orders

Hospital order may be attached

Ordering Physician _____ Med. Record (MR)/Patient # _____

Ordering Physician's Phone/Fax # _____ Patient's Phone# _____

Patient's Name _____ DOB _____ Age _____ Sex ☐ M ☐ F

☐ Inpatient ☐ Outpatient Facility _____ Room _____

Height _____ ☐ in ☐ cm Weight _____ ☐ lb ☐ kg Hgb/Hct ____ / ____

Est. TBV _____ Est TPV _____ Est. ECV (15% TBV adult; 10% TBV pediatrics) _____

Allergies _____

ACE inhibitors: ☐ NA ☐ No ☐ Yes _____ Hold for 24-48 hours prior to apheresis procedures

Diagnosis _____ ASFA Category _____ **Category III or IV consult with Field MD**

Procedure Type ☐ Plasma Exchange ☐ WBC Depletion ☐ RBC Exchange/Depletion ☐ Platelet Depletion
☐ LDL Reduction ☐ Photopheresis ☐ WB phlebotomy _____ mL

Start Date _____ Frequency _____ Duration/Target _____

Replacement Fluid ☐ 5% Albumin ☐ FFP/Cryo poor ☐ RBCs ☐ 0.9% NaCl

Volume to exchange/process _____ Fluid Balance _____ %

5% Albumin: Have _____ mL at bedside; administer _____ mL to _____ mL during procedure

0.9% NaCl: Have _____ mL at bedside; administer _____ mL to _____ mL during procedure

FFP/Cryo poor: Have _____ mL on hold; administer _____ mL to _____ mL during procedure

RBC: Have _____ mL/units on hold _____ Ending HCT _____ %

Vascular Access: ☐ Central Line ☐ Implantable Port ☐ Peripheral ☐ Fistula

Medications

☐ Calcium Gluconate (10%) _____ grams at bedside

Adult procedure: Administer Calcium Gluconate (10%) _____ mL to _____ mL per each liter of replacement fluid

Pediatric Procedure: Administer Calcium Gluconate (10%) at a rate of _____ mL/hour **or** per ordering physician

☐ Normal saline: 1 x 1000 mL; 1 x 250 mL bags each day of procedure

☐ Diphenhydramine (Benadryl) _____ mg ☐ PO ☐ IV ☐ Acetaminophen (Tylenol): _____ mg ☐ PO ☐ IV

☐ IV Fluid Bolus: ☐ Crystalloids _____ mL ☐ Colloids _____ mL ☐ Other _____ mL

☐ Per catheter volume pack with ☐ Heparin 1000:1 ☐ Heparin 5000:1 ☐ Sodium Citrate 4%

☐ Pack implantable port with: ☐ Heparin 100:1; 5 mL ☐ Other _____

Laboratory

☐ Type & Screen prior to first treatment **ONLY REQUIRED FOR RBCx or when using plasma as replacement fluid**

Test	Frequency	Test	Frequency	Test	Frequency
CBC	☐ Pre ☐ Post ☐ Other _____	Coags (PT/PTT/INR)	☐ Pre ☐ Post ☐ Other _____	Hgb electrophoresis	☐ Pre ☐ Post ☐ Other _____
CMP	☐ Pre ☐ Post ☐ Other _____	Fibrinogen	☐ Pre ☐ Post ☐ Other _____	Other _____	☐ Pre ☐ Post ☐ Other _____
LDH	☐ Pre ☐ Post ☐ Other _____	☐ ADAMTS13 activity w/reflex inhibitor & antibody (prior to first exchange for suspected TTP)			

Ordering Physician's Signature _____ Date _____

Field Medical Director Signature _____ Date _____

Vitalant Use Only

Order Received by _____ Date _____ Time _____

FMD Notified _____ Date _____ Time _____

BS 702 (Rev. 5)
SVC010

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Center Information:

Therapeutic Apheresis Informed Consent

☐ Plasma Exchange ☐ Red Cell Exchange/Depletion ☐ Platelet Depletion

☐ White Cell Depletion ☐ LDL Apheresis ☐ Extracorporeal Photopheresis

Patient Name: _____

Name of Relative and/or Legal Guardian (if appropriate):

Name: _____

Relationship: _____

Name and title of person who discussed this procedure with me:

Name: _____

Title: _____

General Information:

My physician _____, M.D./D.O., has recommended that one or more Therapeutic Apheresis procedures be performed. The number of procedures will be determined by my physician.

I understand that therapeutic apheresis is a treatment that removes one or more components from my blood. A needle will be placed in my arm or a catheter will be placed in a large vein. My blood will go into a machine. The machine will separate my blood into components (red blood cells, white blood cells, platelets, and plasma). The component(s) my doctor selected will be gathered into a collection bag. The rest of my blood will be returned to me through a needle in my other arm or through the catheter. The supplies used for this procedure are sterile and used only once, then thrown away. During the procedure, anticoagulant will be added to my blood as it is collected. This reduces the chance of clotting. Although some anticoagulant is returned to me with my blood, my body will rapidly process and eliminate it. This procedure removes some of my blood volume, so I may receive various fluids or blood products to replace the blood volume removed. My doctor will choose the replacement fluids or products. These may include plasma, albumin, saline, hetastarch, calcium, red blood cells, or platelets.

The benefit/purpose of therapeutic apheresis is to remove antibodies, harmful abnormal blood cells, or other substances from my blood that might be causing damage to my body.

Potential Risks/Discomforts: I have been informed of the following.

- Due to a needle being in place for several hours, discomfort, bleeding, bruising, nerve irritation/injury, or infection at the site may occur.
- Central venous catheter (CVC) placement is commonly ordered by your physician if the veins in your arms or legs are not suitable for therapeutic apheresis. The possible complications associated with CVC include bleeding (around the catheter insertion site or into the space around your lung or heart), collapsed lung (pneumothorax), infection, air embolism or air introduced into the soft tissues of the chest or neck.
- The anticoagulant may cause temporary tingling of the lips and/or fingers, chills, stomach or muscle cramps, anxiety, nausea/vomiting, or on rare occasions seizures.
- Allergic reactions that are mild (itching, hives, wheezing) to severe (airway swelling, shock) can occur, particularly in individuals on (angiotensin converting enzyme inhibitor (ACEI) medication.
- Your procedure may require the use of blood components. The use of these products may cause transfusion associated circulatory overload, transfusion related acute lung injury, allergic reaction, hemolysis and fever. Blood products are tested before transfusion and carry low risk of transmitting infectious diseases (hepatitis, HIV, bacteria or other, more rare, infectious diseases.

BS 707A (Rev. 6)
SVC100

Page 1 of 2

	aTTP ≤ 6 hours (n = 21)	aTTP > 6 hours (n = 14)	Non-aTTP (n = 73)	Unadjusted *p*-value[a]
A. Demographics and clinical features, median (IQR) or n (%)				
Age, years	41.0 (24.0-69.0)	48.5 (36.0-81.0)	55.0 (24.0-84.0)	0.25[b], 0.06[c]
Gender, M:F, n (%)	4:17 (19.1:80.9)	4:10 (28.6:71.4)	27:46 (37.0:63.0)	0.69[b], 0.14[c]
Managed in ICU, n (%)	8 (38.1)	7 (50.0)	45 (61.6)	0.49[b], 0.07[c]
Managed at central site,[d] n (%)	16 (76.2)	11 (78.6)	68 (93.2)	0.87[b], 0.02[c]
History of aTTP, n (%)	15 (71.4)	7 (50.0)	0 (0)	0.20[b], <0.01[c]
Active cancer,[e] n (%)	1 (4.8)	1 (7.1)	21 (28.8)	1.00[b], 0.01[c]
Transplant status,[f] n (%)	0 (0)	0 (0)	10 (13.7)	1.00[b], 0.03[c]
Simple plasma transfusion prior to TPE, n (%)	0 (0)	2 (14.3)	0 (0)	0.15[b], 0.10[c]
C. Time to event, median (5th-95th percentiles)				
Request to central venous access, h[k]	2.1 (0.1-3.7)	4.2 (0.5-7.7)	2.5 (0.6-7.3)	0.02[b], 1.00[c]
Request to plasma product issuance, h	2.9 (2.2-4.6)	5.6 (1.5-8.1)	3.4 (1.4-9.4)	<0.01[b], 0.83[c]
Both central venous access and plasma issuance to TPE nurse/equipment arrival, h	1.3 (0.6-2.6)	2.1 (0.5-5.0)	1.7 (0.5-4.1)	0.07[b], 0.69[c]
TPE nurse/equipment arrival to initiation of procedure, h	0.9 (0.6-1.9)	1.0 (0.6-1.6)	0.9 (0.4-2.1)	0.54[b], 1.00[c]
Request to initiation of TPE, h	4.9 (3.3-5.7)	7.3 (6.3-11.5)	5.4 (3.2-11.0)	<0.01[b], 1.00[c]

	aTTP ≤ 6 hours (n = 21)	aTTP > 6 hours (n = 14)	Non-aTTP (n = 73)	Unadjusted *p*-value[a]
D. Outcomes				
In-hospital mortality, n (%)	2 (9.5)	2 (14.3)	12 (16.4)	1.00[b], 0.58[c]
Length of stay, days	8.3 (3.9-27.0)	9.0 (4.7-44.1)	11.6 (4.1-45.5)	0.76[b], 0.20[c]
Days to durable platelet count recovery [1]	4.0 (2.0-18.0)	4.5 (2.0-9.0)	8.0 (1.0-32.0)	0.66[b], <0.01[c]
B. Laboratory data at time of TPE request, median (IQR) or n (%)				
ADAMTS-13 activity, %	5 (<1-58)	5 (<1-56)	64 (21-100)	1.00[b], <0.01[c]
Severe ADAMTS-13 deficiency,[g] n (%)	15 (71.4)	13 (92.9)	0 (0)	0.20[b], <0.01[c]
Platelet count, $\times 10^9$/L	25 (8-70)	12 (4-64)	44 (7-138)	0.40[b], <0.01[c]
PLASMIC score	5.0 (3.0-7.0)	5.5 (3.0-7.0)	4.0 (2.0-6.0)	1.00[b], <0.01[c]
PLASMIC score > 5, n (%)	10 (47.6)	7 (50.0)	9 (12.3)	0.89[b], <0.01[c]

inappropriateness

dall’aferesi terapeutica …

… all’ aferesi clinica !

CENTRALIZZAZIONE DEL PAZIENTE

- ❑ **DIAGNOSI CORRETTA**
- ❑ **POSSIBILITA' DI TRASFERIMENTO IN TEMPI RAPIDI**
- ❑ **DISPONIBILITA' DI POSTO LETTO IN REPARTO ORDINARIO/TERAPIA INTENSIVA NELLA SEDE DI TRASFERIMENTO**
- ❑ **IN QUESTA STESSA SEDE, COMPETENZE CLINICHE SPECIFICHE NELLA CURA DELLA MALATTIA (h 24/365 gg anno)**

AFERESI TERAPEUTICA IN EMERGENZA/URGENZA

ASPETTI PRIORITARI

- **ORGANIZZATIVI** (***formazione del personale, pronta disponibilità, strumentazioni adeguate***)
- **STRUTTURALI** (***attrezzature e locali***)
- **PROCEDURALI** (***standardizzazione del percorso operativo, dalla consulenza all'avvenuta prestazione***)

PROBLEMATICHE APERTE

- ❑ TUTTE !!!
- ❑ COME FARE ???
- ❑ PDTA (es. TMA)

Luca Signorelli
Cappella di San Brizio,
Duomo di Orvieto (1409-1502)

*Percorso Diagnostico, Terapeutico e Assistenziale (**PDTA**) relativo a:*

PORPORA TROMBOTICA TROMBOCITOPENICA ACQUISITA (aTTP)

(afferente al gruppo delle microangiopatie trombotiche - Codice di esenzione RGG010)

INDICATORE	FONTE	FASE	VALORE SOGLIA
Tempo per esecuzione di esami laboratorio	Laboratorio	Diagnostica	3 ore
Tempo per esecuzione di consulenza ematologica/valutazione striscio di sangue periferico	Laboratorio/Ematologo	Diagnostica	24 ore
Tempo per spedizione del campione per dosaggio attività ADAMTS13 + Ab anti-ADAMTS13	Centro HUB	Diagnostica	24 ore
Esito attività ADAMTS13	Centro HUB	Diagnostica	24-36 ore
Esito presenza Anticorpi anti-ADAMTS13	Centro HUB	Diagnostica	24-36 ore
Tempo di inizio di terapia con PEX	Ematologo, Internista	Terapeutica	48-72 ore
Durata esecuzione di una singola PEX	Trasfusionista	Terapeutica	4-6 ore

Il tema della multidisciplinarietà

- Non è un valore di per sé
- Ma è una strategia per raggiungere un obiettivo (migliorare l'assistenza)
- Nasce e si diffonde come «verbo» del passaggio ideologico dalla medicina malattia-centrica alla medicina paziente-centrica
- Offre vantaggi agli attori del processo, *che vanno misurati e dimostrati, tenuto conto che vi può essere una dicotomia tra la soddisfazione del paziente e l'outcome clinico*
  - *Es. positivi in fibromialgia, lupus, psoriasi, vasculiti*
  - *Es. negativi in osteoartrosi*
- Implica tuttavia una tensione verso un modello organizzativo in cui la responsabilità individuale del medico deve essere ripensata e l'attività del team valorizzata anche economicamente (budget)
- Necessita il riconoscimento reciproco di un alto profilo di competenza
  - Team interaziendali piuttosto che intraaziendali
- Spinge verso un modello ospedaliero *problem-solving* e non più *disease-solving*, in cui viene meno la difesa strenua dei confini della propria disciplina
  - Riorganizzazione degli spazi fisici degli ospedali come stimolo
- Implica dunque la capacità degli attori a cedere terreno e a condividere i pazienti
- Non è detto che queste condizioni si possano sempre realizzare
  - Vocazioni personali

per cortesia del prof. Luca Quartuccio (Udine), 2019

REGIONE DEL VENETO
Azienda Ospedale Università Padova

IMMUNOTRASFUSIONALE DI PADOVA
SIT PD

Unità di Aferesi Terapeutica
U.O.C. Immunotrasfusionale

Grazie per l'attenzione