TRANSFUSIÓN DE HEMODERIVADOS EN PACIENTES POLITRAUMATIZADOS

IV CURSO EDUCATIVO 2015-TRUJILLO
ACTUALIZACIÓN EN HEMATOLOGIA
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GENERALIDADES

- TRAUMA SEVERO: Principal problema de salud, >5 Millones fallecen/año
- Año 2020: fallecerán > 8 millones
- Sangrado pos-trauma no controlado:
  - Causa principal de muerte potencialmente prevenible

GENERALIDADES

- Manejo apropiado del paciente PTZ/ sangrado masivo: Identificación temprana origen de sangrado; minimizar pérdidas sangre; restaurar perfusión tisular y lograr estabilidad hemodinámica.
- 1/3 pacientes: Coagulopatía en admisión. Subgrupo: Incidencia incrementada FOM y muerte.
- Coagulopatía traumática aguda: Multifactorial

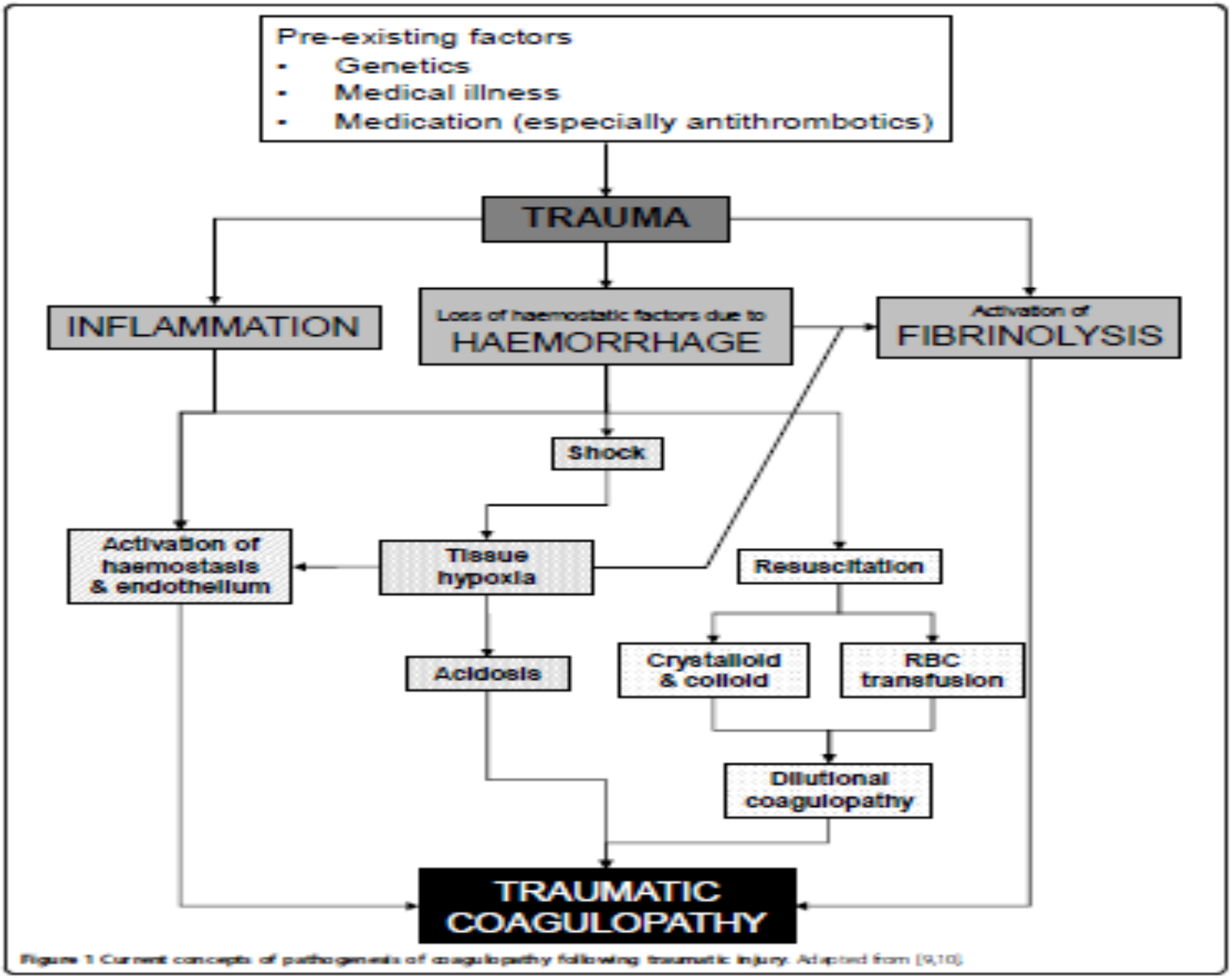

Figure 1 Current concepts of pathogenesis of coagulopathy following traumatic injury. Adapted from [9,10].

TAMIZAJE DEL DONANTE

1. RPR para sìfilis
2. Anticuerpos para Chagas
3. AgsVHB
4. Anti Core VHB
5. Anticuerpos VHC
6. Anticuerpos VIH 1,2
7. HTLV- I-II

Grupo ABO y Rh, anticuerpos antieritrocitarios irregulares

Selection of Blood and Plasma by ABO Type

Component	Recipient ABO Type	Selection of Blood Component: Preferred	Selection of Blood Component: Alternate
Red blood cells	**O**	**O**	**None**
	A	**A**	**O**
	B	**B**	**O**
	AB	**AB**	**A, B, O**
Fresh frozen plasma	**O**	**O**	**A, B, AB**
	A	**A**	**AB**
	B	**B**	**AB**
	AB	**AB**	**None**

Modified from Jeter EK, Spivey MA. Introduction to transfusion medicine: a case study approach. Bethesda, MD: American Association of Blood Banks Press, 1996.

SOLUCIONES IV COMPATIBLES

- Plasma ABO compatible
- Albumina al 5%
- Soluciones electrolíticas isotónicas sin calcio: solución salina 0.9 %

CONTRAINDICADOS:

- Ringer lactato, Dextrosa al 5%, Cloruro de sodio hipotónico

Spahn *et al. Critical Care* 2013, **17**:R76
http://ccforum.com/content/17/2/R76

CRITICAL CARE

RESEARCH Open Access

Management of bleeding and coagulopathy following major trauma: an updated European guideline

Donat R Spahn[1], Bertil Bouillon[2], Vladimir Cerny[3,4], Timothy J Coats[5], Jacques Duranteau[6], Enrique Fernández-Mondéjar[7], Daniela Filipescu[8], Beverley J Hunt[9], Radko Komadina[10], Giuseppe Nardi[11], Edmund Neugebauer[12], Yves Ozier[13], Louis Riddez[14], Arthur Schultz[15], Jean-Louis Vincent[16] and Rolf Rossaint[17*]

PAQUETE GLOBULAR

INDICACIONES DE PGR

- Recomendamos un nivel de Hb: 7-9 g/dl (Grado 1C)
- No hay estudios aleatorizados y controlados de comparación: Régimen restrictivo versus liberal
- Pacientes con Inj.CEREBRAL: R. restrictivo
- Transfusiones de PGR asocian: Incremento de mortalidad, injuria pulmonar, infecciones, falla renal; GR > 14 días.

Critical Care 2013;17:R76

Coagulation monitoring

Recommendation 12 We recommend that routine practice to detect post-traumatic coagulopathy include the early, repeated and combined measurement of prothrombin time (PT), activated partial thromboplastin time (APTT), fibrinogen and platelets. (Grade 1C)

We recommend that viscoelastic methods also be performed to assist in characterising the coagulopathy and in guiding haemostatic therapy. (Grade 1C)

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USO DE ACIDO TRANEXÁMICO

Antifibrinolytic agents

Recommendation 24 We recommend that tranexamic acid be administered as early as possible to the trauma patient who is bleeding or at risk of significant hemorrhage at a loading dose of 1 g infused over 10 minutes, followed by an intravenous infusion of 1 g over 8 h. (Grade 1A)

We recommend that tranexamic acid be administered to the bleeding trauma patient within 3 h after injury. (Grade 1B)

We suggest that protocols for the management of bleeding patients consider administration of the first dose of tranexamic acid en route to the hospital. (Grade 2C)

Plasma

Recommendation 26 We recommend the initial administration of plasma (fresh frozen plasma (FFP) or pathogen-inactivated plasma) (Grade 1B) or fibrinogen (Grade 1C) in patients with massive bleeding.

If further plasma is administered, we suggest an optimal plasma:red blood cell ratio of at least 1:2. (Grade 2C)

We recommend that plasma transfusion be avoided in patients without substantial bleeding. (Grade 1B)

PLASMA FRESCO CONGELADO Y CRIOPRECIPITADO

Fibrinogen and cryoprecipitate

Recommendation 27 We recommend treatment with fibrinogen concentrate or cryoprecipitate in the continuing management of the patient if significant bleeding is accompanied by thromboelastometric signs of a functional fibrinogen deficit or a plasma fibrinogen level of less than 1.5 to 2.0 g/l. (Grade 1C)

We suggest an initial fibrinogen concentrate dose of 3 to 4 g or 50 mg/kg of cryoprecipitate, which is approximately equivalent to 15 to 20 single donor units in a 70 kg adult. Repeat doses may be guided by

Platelets

Recommendation 28 We recommend that platelets be administered to maintain a platelet count above 50 x 10^9/l. (Grade 1C)

We suggest maintenance of a platelet count above 100 x 10^9/l in patients with ongoing bleeding and/or TBI. (Grade 2C)

We suggest an initial dose of four to eight single platelet units or one aphaeresis pack. (Grade 2C)

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GRACIAS POR SU ATENCION