

# Rituximab in the treatment of acquired haemophilia A: a case report.

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## Background:

- Acquired haemophilia A (AHA) is a very rare disease caused by the development of clotting factor VIII (FVIII) inhibitors, resulting in haemorrhage and bleeding episodes.
- This situation has been reported during interferon therapy for chronic hepatitis C virus (HCV) infection.
- To eliminate FVIII inhibitors, immunosuppressive therapy (IST) with corticosteroids and cytotoxic drugs is regarded as the mainstay of therapy.

## Objective:

To describe a case of AHA refractory to conventional therapy that has responded to rituximab.

## Methods:

Patient clinical history was reviewed and the following laboratory investigations were collected: haemoglobin, platelets count, coagulation tests (prothrombin time and activated partial thromboplastin time) and FVIII and inhibitor levels.

## Results:

	Diagnosis of reactivation	Antiviral therapy		At admission	Day +6 of IST	Day +14 of IST	Day +23 of IST	Before 1 <sup>st</sup> dose of rituximab	Before 2 <sup>nd</sup> dose of rituximab	Before 3 <sup>rd</sup> dose of rituximab	Before 4 <sup>th</sup> dose of rituximab	After 8 weeks of rituximab	After 11 weeks of rituximab
	Nov-2010	Week 4	Week 12	Week 21									
Platelets (x10 <sup>3</sup> cel/mcL)	155	105	73	91	137	112	90	108	126	140	130	163	
Haemoglobin (g/dL)	14,9	15	14,2	9,9	11,5	12,2	11,4	11,1	10,2	11,4	11,5	12,4	
PT (s)	10,1	12,5	11,8	11,9	10,8	13,3	12,5	11,9	12,1	11,7	12	11,9	12,4
aPTT (s)	29,7	30,3	42,2	75	67,1	70,2	54,9	34,7	35,7	32	31,2	28,6	28
FVIII (U/dL)				0	1	3	2	12	25			138	141
FVIII inhibitor (BU/mL)				Insufficient sample	345	105	105	24	3			Undetectable	

aPTT: activated partial thromboplastin time ; BU: Bethesda units; IST: immunosuppressive therapy; PT: prothrombin time.

- A non-haemophilic 63 year old male patient with chronic HCV infection was receiving treatment with pegylated-interferon at 180 mcg weekly plus ribavirin at 400 mg twice daily. After 21 weeks of antiviral therapy, patient was admitted to hospital for a large haematoma in right lateral abdominal muscles, coagulopathy and AHA.
- IST with intravenous methylprednisolone and oral cyclophosphamide was started. After 4 weeks, a slight improvement was obtained and, for this reason, oral cyclophosphamide was replaced by four once-weekly courses of intravenous rituximab at 375 mg/m<sup>2</sup>, and oral prednisone at 30 mg twice daily.

## Conclusions:

After failure of standard therapy, the use of rituximab in off label condition appears to be an effective option to eliminate FVIII inhibitors in patients with acquired haemophilia.

## Disclosure:

Authors of this presentation have nothing to disclose.

## References:

Aggarwal, A., Grewal, R., Green, R.J., Boggio, L., Green, D., Weksler, B.B., Wiestner, A. & Schechter, G.P. Rituximab for autoimmune haemophilia: a proposed treatment algorithm. *Haemophilia*, 2005(11): 13–19.