

# ILIOPSOAS HAEMORRHAGE IN PATIENTS WITH HEMOPHILIA

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## OBJECTIVES

- Iliopsoas haematoma is serious and potentially life threatening complication of haemophilia, associated with recurrence and significant morbidity including the development of hemophilic pseudotumors.
- In current era of modern therapy the retroperitoneal bleeding is considered as a rare manifestation of hemophilia and the reports on the management of this clinical situation are limited.
- However, therapy of iliopsoas hematoma is demanding on the treatment products and the management is challenging especially in hemophilia with inhibitor.

## AIM

To evaluate treatment and outcomes of iliopsoas hematoma in hemophiliacs treated at our centre in 1992-2011, the era of a wide use of home therapy.

## METHODS

Retrospective review of all iliopsoas bleeds treated at our centre during the defined period.

We evaluated:

- provoking reason for bleeding
- subjective and objective clinical symptoms
- treatment demands and factor consumption
- duration of the hospital stay
- outcome of retroperitoneal bleeding

## PATIENTS and THERAPY

In a 20 yrs period 173 & 32 hemophilia A & B pts received follow up at our centre, respectively.

Six severe and one moderate hemophilia A pts were treated for a total 18 iliopsoas bleeds.

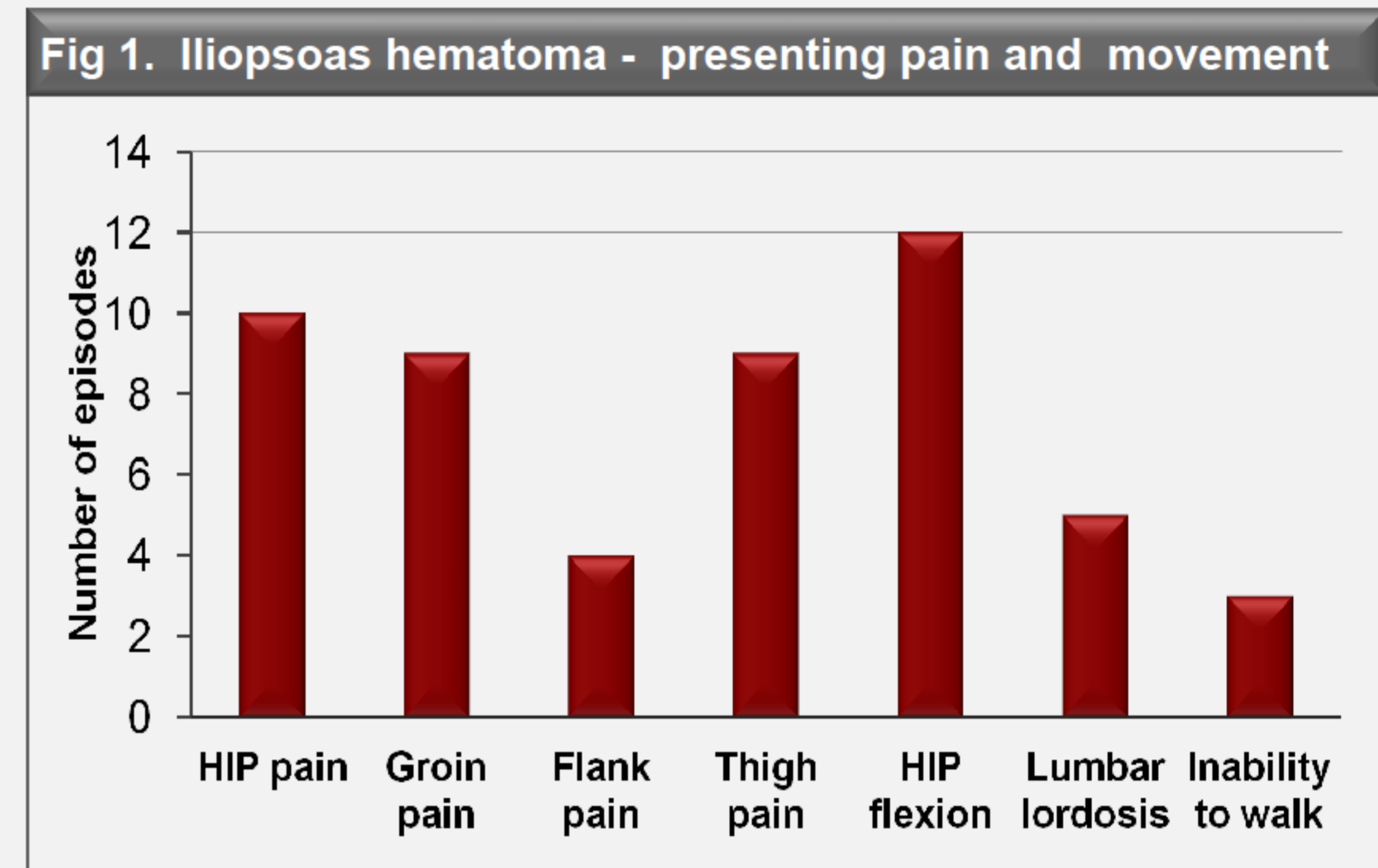
**Management of iliopsoas hematoma:**

- Hospitalisation, conservative approach
- Absolute bed rest 7-10 days
- Intensive replacement therapy  $\geq 12$  days
- FVIII target: initial  $\geq 80\%$   
1st week troughs  $\geq 50\%$   
2nd-3rd week troughs  $\geq 30\%$
- Pts with inhibitor -low titer: high dose FVIII  
- high titer: rFVIIa, FEIBA
- Physiotherapy
- Prophylaxis until complete resolution

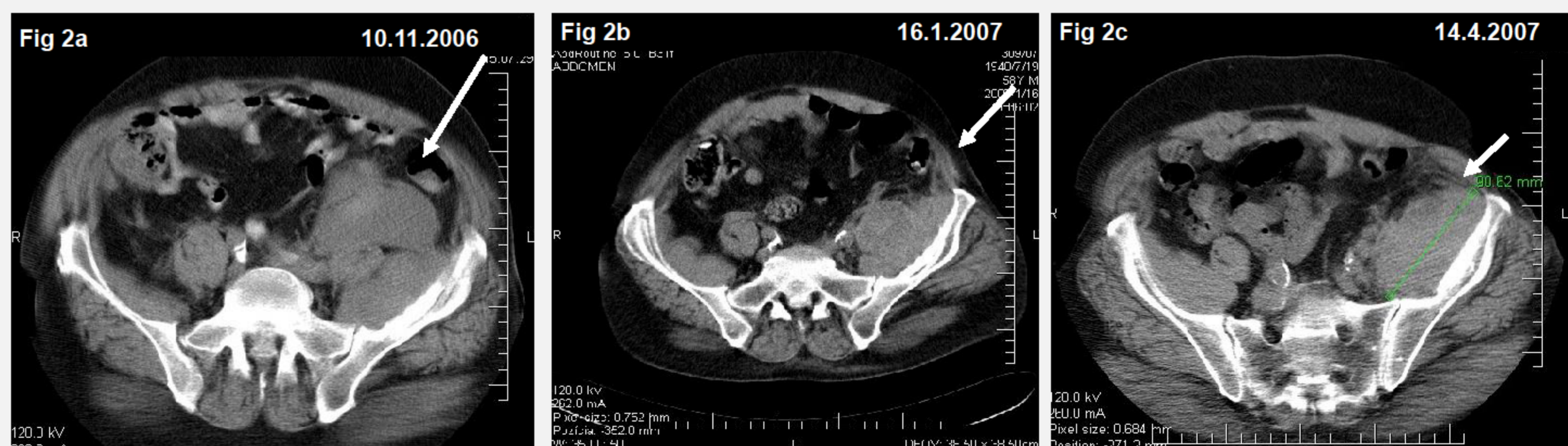
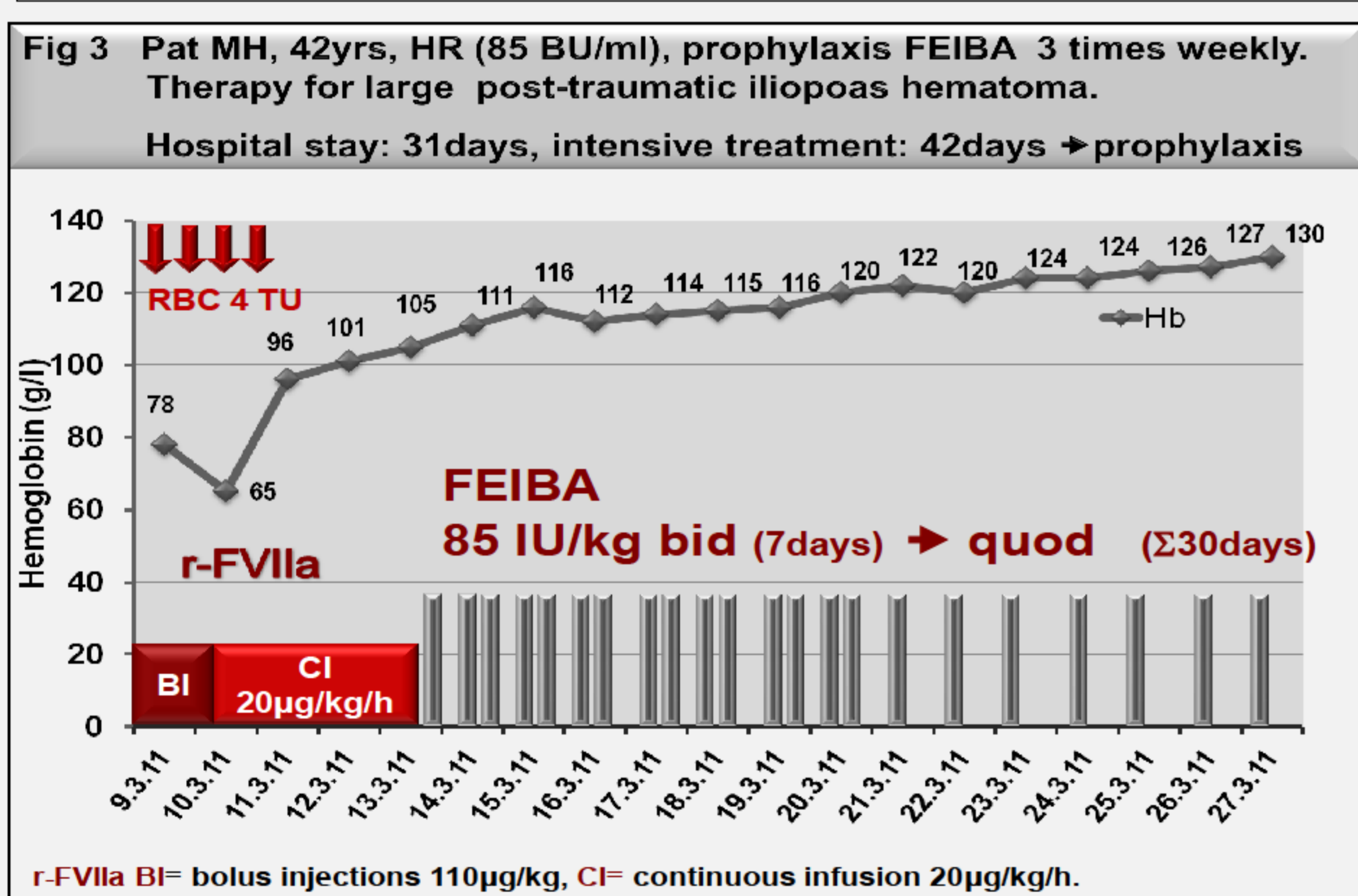
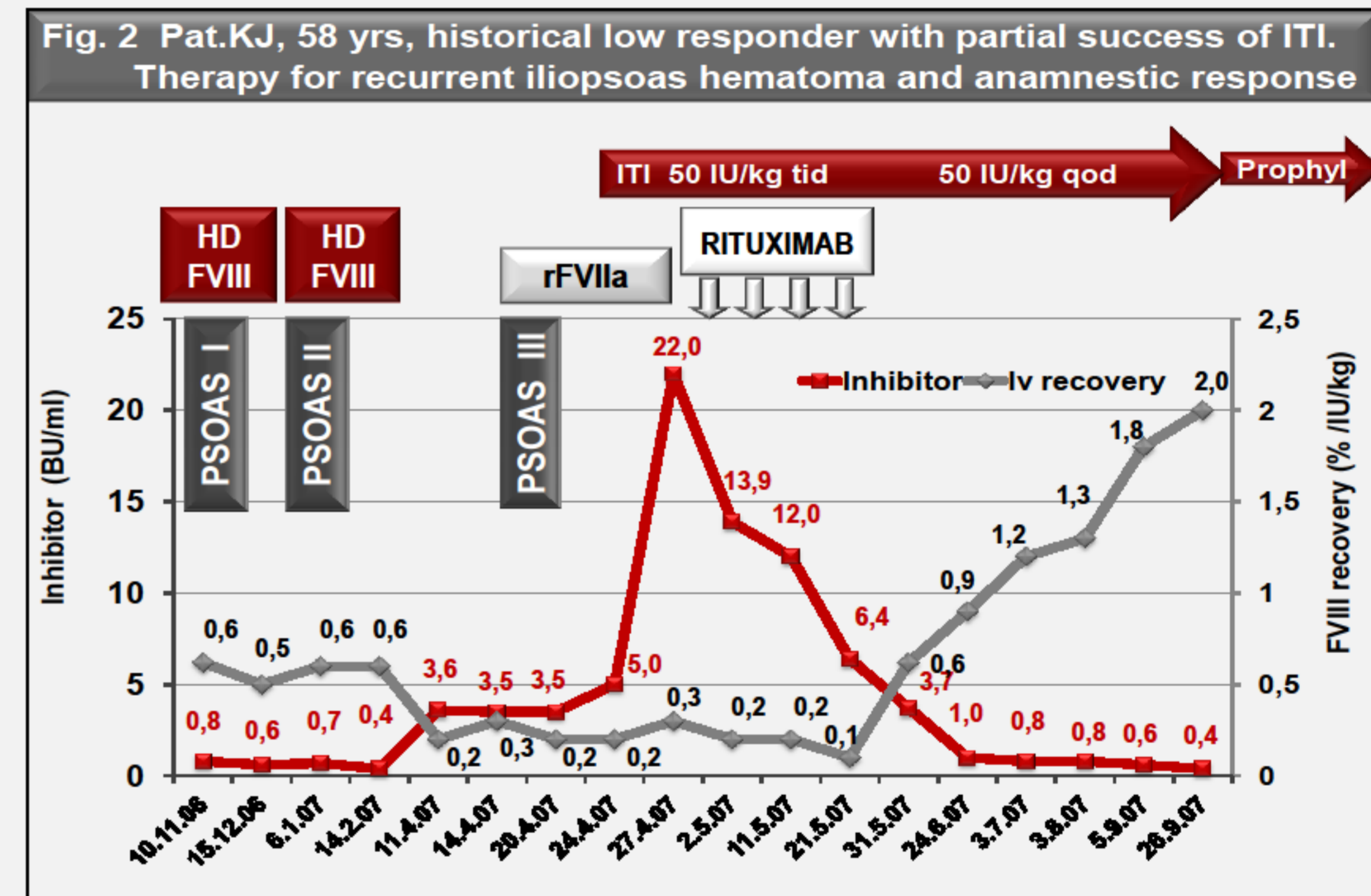
## RESULTS

Characteristic	n
Number of pts	7
Hemophilia A severe / moderate (n)	6/1
Inhibitor patients (n) (titre high /low)	2 (1/1)
Age at the time of the bleed (M, range)	50 (14-58) yrs
Pts with repeated bleeds (n,%)	4/7 (57%)
Total number of episodes	18
post-traumatic (n/%)	12 (67%)
spontaneous (n/%)	6 (33%)
recurrent/repeated bleeds (n/%)	11 (61%)

SYMPTOM	Episodes (n/%)
Pain	18 (100%)
Hip flexion contracture	12 (67%)
Femoral nerve paresthesia	11 (61%)
Diagnosis confirmed by CT / US	14 / 3
Diameter of hematoma (M,range)	12 (5.6 – 20.0) cm
Drop of hemoglobin > 2.0g/dl	17 (94%)
Hemoglobin level (M,range)	8.9 (6.0 – 10.5) g/dL



Patients	Number of patients /episodes	Hemoglobin nadir g/dL (M, range)	Hospital stay (days) (M,range)	Products consumption / episode (M, range)				Prophylaxis until resolution (n patients)
				FVIII (IU/kg)	rFVIIa ( $\mu$ g/kg)	FEIBA (IU/kg)	RBC (n TU)	
Non-inhibitor	5/13	9.7 (6.0-10.5)	16 (12-26)	525 (370-980)	-	-	3 (0-5)	3
With inhibitor	2/5	6.9 (6.5-7.2)	25 (21-31)	1725 (1637-1900)	1240; 2110	1400 (333-2626)	6 (4-7)	2



## CONCLUSIONS

- In the era of modern therapy of hemophilia, the iliopsoas hematoma is relatively infrequent type of bleeding, mostly caused by trauma.
- This bleed still may be life-threatening with a high rate of recurrence.
- Treatment is conservative with a need of intensive factor replacement for 12-30 days.
- Hematoma resorption is slow (2-5 mths), it is well controlled by US.
- Long term prophylaxis until the complete resolution is justified to prevent repeated bleeds and the development of pseudotumors.



Fig 3a Pat MH with inhibitor, large iliopsoas hematoma



Fig 4 Iliopsoas hematoma and a large remote iliopsoas pseudotumor