



Causes and consequences in hospitalizations of patients with hemophilia in a hemophilia treatment center in Korea.^{Jung}

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Introduction

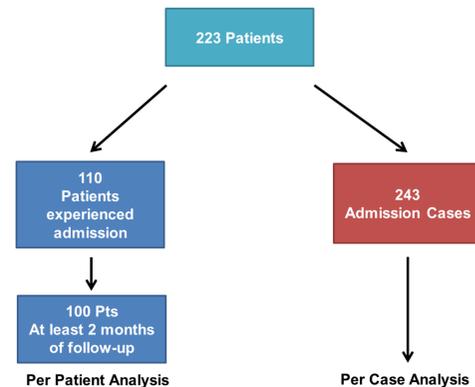
- Care for hemophilia patient
 - Differed by medical and social environment
 - Needs expensive treatments : needs cost-effectiveness
 - Rare type of disorders – lack of sufficient experience in general physicians
- Utilization of hospital and specific treatment
 - Not sufficient data
 - Difficult to adapt to specific society
 - Some determinants
 - Inhibitor patients – higher cost
 - % of patients with at least one hospitalization
 - 100% for inhibitor patients, 40% for non-inhibitor patients

Materials and Methods

- To elucidate the clinical role of a tertiary care center
 - Analysis of admission causes
 - Clinical burden of patient
 - Clinical burden of specific admission cause
 - To develop appropriate patient and care delivery system in Korea
- Study population
 - Registered hemophilia patients in Yonsei University Health System
 - From Jan 2005 to Nov 2015, Retrospective chart review
- Variables
 - Types of hemophilia : F8, F9, F11, F7, Inhibitors
 - Severity of hemophilia : Mild, moderate, severe, inhibitors
- Number of admissions, Number of ER visits
- Duration of an each admission
- Causes of admissions
- Statistics
 - Descriptive statistics, Chi Squared Test, Kruskal Wallis test and Mann Whitney U test (non-parametric), IBM SPSS statistics, version 23.0.0.0

Results

Figure 1. Patient Population



Results

Figure 2. Follow-Up Duration and Distribution of Admissions (A). Duration of Follow Up, (B). Number of Patients who experienced admissions

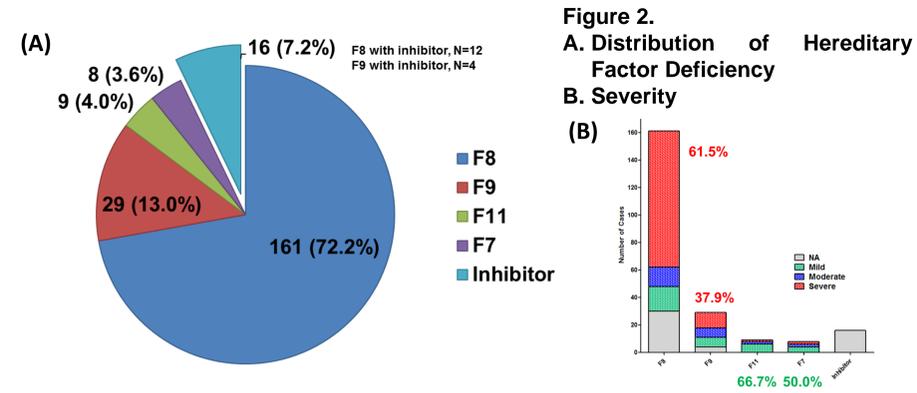
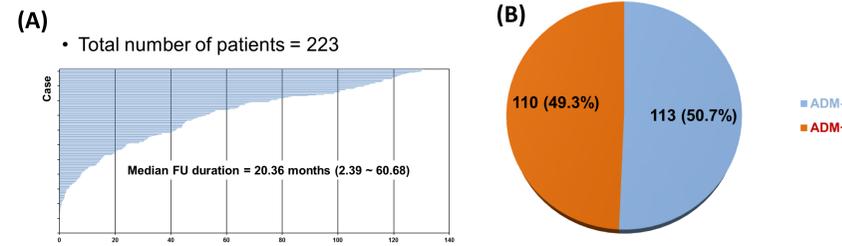


Table 1. Admission Experience by factor deficiency

	ADM-	ADM+	Total
F8	91	70	161
	56.5%	43.5%	100.0%
F9	14	15	29
	48.3%	51.7%	100.0%
F11	4	5	9
	44.4%	55.6%	100.0%
F7	2	6	8
	25.0%	75.0%	100.0%
Inhibitor	2	14	16
	12.5%	87.5%	100.0%
total	113	110	223
	50.7%	49.3%	100.0%

Table 2. Admission Experience by Severity

	ADM-	ADM+	Total
NA	29	5	34
	85.3%	14.7%	100.0%
Mild	11	24	35
	31.4%	68.6%	100.0%
Moderate	10	15	25
	40.0%	60.0%	100.0%
Severe	61	52	113
	54.0%	46.0%	100.0%
Inhibitor	2	14	16
	12.5%	87.5%	100.0%
Total	113	110	223
	50.7%	49.3%	100.0%

Results

Figure 3. Clinical Burden of Hemophilia (A). number of admissions and emergency room visits per person-year. (B). Duration of admission and number of consultations per person-year.

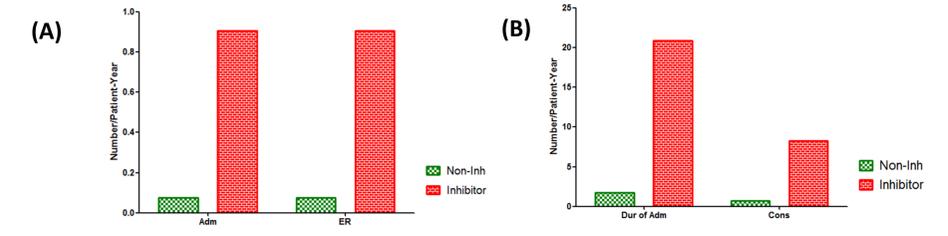


Figure 4. Duration of admission (A) By admission causes. (B) By Severity of Hemophilia

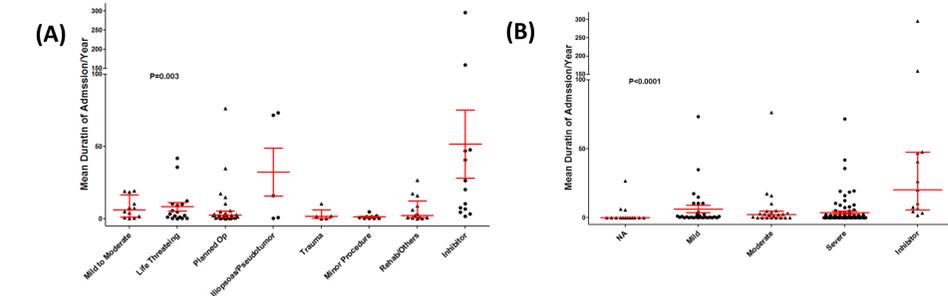


Table 3. Admission Causes by the Type of Hemophilia

Type	Not Related	Mild to Moderate	Life Threatening	Planned Op	Iliopsoas/Pseudotumor/Peritoneal	Trauma	Minor Procedure	Others	Total
F8	24	25	33	32	17	7	12	8	158
	15.2%	15.8%	20.9%	20.3%	10.8%	4.4%	7.6%	5.1%	65.0%
F9	6	8	1	8	2	0	2	2	29
	20.7%	27.6%	3.4%	27.6%	6.9%	0.0%	6.9%	6.9%	11.9%
F11	1	0	0	8	0	1	0	0	10
	10.0%	0.0%	0.0%	80.0%	0.0%	10.0%	0.0%	0.0%	4.1%
F7	4	0	0	4	0	0	0	1	9
	44.4%	0.0%	0.0%	44.4%	0.0%	0.0%	0.0%	11.1%	3.7%
Inhibitor	1	13	6	4	5	0	4	4	37
	2.7%	35.1%	16.2%	10.8%	13.5%	0.0%	10.8%	10.8%	15.2%
Total	36	46	40	56	24	8	18	15	243
	14.8%	18.9%	16.5%	23.0%	9.9%	3.3%	7.4%	6.2%	100.0%

Summary and Conclusion

- 110 (49.3%) patients : at least 1 admission
- Inhibitor patients
 - 87.5% experience at least 1 admission
 - Experience more number of admission, duration of each admission, ER visits, and consultations
- Per Patient : Inhibitor patients, Patients with iliopsoas/abdominal pseudotumor – more clinical burden
- Per Cases : F8 – life threatening, planned Op, F7, F11 – planned Op; Inhibitor – even mild to moderate bleeding
- Special concern on iliopsoas/pseudotumor as well as life threatening bleeding or inhibitor patients

