

AHCDC Rare Inherited Bleeding Disorders Subcommittee Annual Report 2008

Subcommittee Members

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Background and Mandate

Inherited bleeding disorders other than Factor VIII and Factor IX deficiencies and von Willebrand disease can cause major health impairment and even death. Very little is known about the nature and optimal management of these disorders because of their low prevalence in the population. This Subcommittee was established with the **mandate** to:

1. better understand these disease entities
2. enhance delivery of comprehensive care
3. set up management guidelines
4. provide education
5. ensure safety of produce supply
6. further basic and clinical research on individuals with these disorders.

2007-2008

Following the success of a pilot survey in 2002, the Rare Inherited Bleeding Disorders Registry (RIBDR) was established in 2003 to allow tracking of patients in Canada with rare inherited bleeding disorders, i.e. inherited bleeding disorders other than Factor VIII and Factor IX deficiencies and von Willebrand disease. There are presently 1207 patients in the RIBDR, 702 with coagulation factor deficiencies and 505 with platelet function disorders; these results are posted on the CHR website, with the 2008 update just having been made. (See Figure 1 for a summary of accrual of patients into the RIBDR since its inception and Table 1A and B for a summary of RIBDR patients as of April, 2008.)

As in previous years, the latest round of CHR numbers were sent to Centres along with requests for validation of existing data and registration of newly diagnosed patients; this mailing was done in the spring of 2008 by our Data Manager. Responses from the Centres resulted in increased accuracy of data and a 20% increase in registered patients over 2007. Upgrades had been made to CHARMS in previous years allow for collection of data on patients with inherited coagulation factor deficiencies as well as platelet function disorders.

An abstract summarizing RIBDR data was presented as a poster at the XX1st Congress of The International Society on Thrombosis and Haemostasis in Geneva, Switzerland this past summer (*Rand ML, Clark D, Walker I, Wu J, on behalf of the Rare Inherited Bleeding Disorders Subcommittee of the Association of Hemophilia Clinic Directors of Canada: The Canadian Rare Inherited Bleeding Disorders Registry (RIBDR) of coagulation factor deficiencies and platelet function disorders. J Thromb Haemost 5 (Suppl 2):P-M-198, 2007*); it was very well received.

Subcommittee material is posted on the AHCDC website under the sidebar, Rare Inherited Bleeding Disorders: updated diagnostic criteria for rare inherited platelet function disorders; and English and French versions of the second edition of "Disorders of platelet function. An information booklet for patients, families and health care providers", co-authored by Drs. S.J. Israels, M.-C. Poon and M.L. Rand on behalf of the Canadian Pediatric Thrombosis and Hemostasis Network. Registry forms for both coagulation factor deficiencies and platelet function disorders have now been posted on the CHR website.

A draft diagnostic algorithm for platelet function disorders developed by Dr. Israels and now refined by Drs. Israels, Kahr and Rand has been distributed to Subcommittee members for feedback. A finalized version will be posted in the summer of 2008, and feedback from the AHCDC membership will be welcome. A succinct guide for the use of the algorithm, along with further details on, for example, bleeding scores, blood films, platelet aggregation studies, etc will be developed in the coming year.

We are still in the process of identifying laboratories that can do specialized testing, including mutational analysis on specific coagulation factors and on platelet proteins.

Other future plans include: summarizing data for publication; generating evidence-based management guidelines; encouraging research, both clinical and basic; and providing data for product usage. Participation in international registries continues to require consideration/discussion.

Figure 1. Number of RIBDR patients, 2002-2008

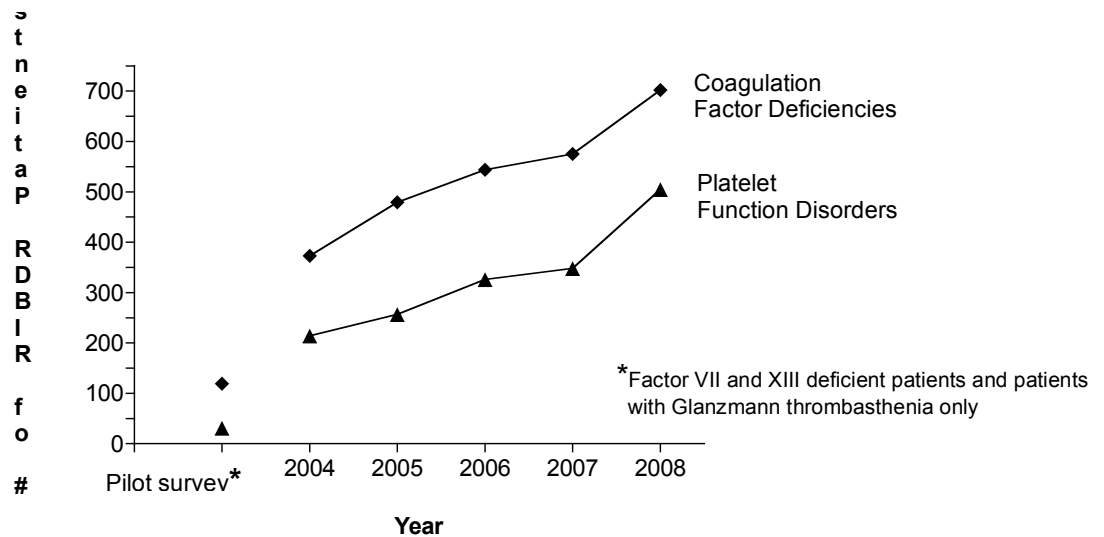


Table 1. RIBDR Patients as of April, 2008

A. Patients with Coagulation Factor Deficiencies (n=702)

Disorder	Total # of patients	Factor level			
		Severe	Moderate	Mild	Unknown
Dysfibrinogenemia	22	1	0	5	16
Factor I	68	7	24	26	11
Factor II	7	1	1	4	1
Factor V	41	5	2	29	5
Factor VII	207	31	24	149	3
Factor X	30	1	8	21	0
Factor XI	274	22	30	206	16
Factor XIII	48	31	6	7	4
Factor V/VIII	5	0	0	5	0

B. Patients with Platelet Function Disorders (n=505)

Glycoprotein deficiencies 76

Glanzmann thrombasthenia	48	Bernard-Soulier syndrome	27
Thromboxane receptor deficiency	1		

Storage pool deficiency 95

Gray platelet syndrome	5	Quebec platelet disorder	37
Dense (δ) granule disorder	22	Hermansky-Pudlak syndrome	7
Chediak-Higashi syndrome	1	αδ granule disorder	0
Empty sack syndrome	2	Platelet release defect	8
Storage pool deficiency undefined	13		

Familial thrombocytopenia 43

MYH9-related disorders	12	Wiskott-Aldrich syndrome	1
Epstein syndrome	1	Familial thrombocytopenia undefined	23
Fechtner syndrome	0	Montreal Platelet Syndrome	0
May-Hegglin anomaly	6		
Sebastian syndrome	0		

Other 291

Noonan syndrome	28	Ehlers Danlos syndrome	6
TAR syndrome	1	Undefined platelet function disorder	256