Blood Counts



Volume 9, Issue 2, July 2012

IVIG Dose Calculator - 1 Click Away

Now Available for Your Smart Phones

NIG Tools http://gov.ns.ca/h		
NOVA SCOT		Hame
IVIG Re	esources	
Dose Calculator (Adju	sted Body Weight)	7
Adult Guidelines Pediatric and FAIT Gu	idalinas	
Position and PAIT GO	noun noa	
		_

The IVIG mobile application includes: the IVIG Adjusted Body Weight dose calculator, Adult, Pediatric and FAIT guidelines

This app is compatible with all smart phone devices (Blackberry, IPhone, Androids). Simply insert http://www.gov.ns.ca/health/nspbcp/mobile into your browser and save on your device for easy access.

The mobile application for IVIG is easy to use and ideal for physicians who want a quick reference to the IVIG dose calculator based on Adjusted Body Weight and Nova Scotia's Intravenous Immune Globulin (IVIG) Guidelines for the most common adult and pediatric indications. The intention of the application is to ease the ordering process and improve compliance with the guidelines.

In This Issue

1

r	VT	G	D	ose	Cal	cul	lato	r	
1	V I	U	\mathbf{L}	USC	Cal	Lu	aw	1	

Upcoming Events

New Dartmouth Production and 2

Distribution Site

Nursing Blood Transfusion 3

Competency via E-learning

Nova Scotia Has Lowest 3

Discard Rate in 12 Years

Managing the Bleeding Patient 4

On the New Anticoagulants

Upcoming Events

AATB 36th Annual Meeting Keystone, CO September 9, 2012

AABB Annual Meeting & CTTXPO 2012 Boston, MA October 6 - 9, 2012

"Blood Matters" 3rd **Annual Fall Education Day** Weather Watch Room, Dickson Bldg, QEII Health Sciences Centre Halifax, NS November 2, 2012

Canadian Society for Transfusion Medicine (CSTM) Conference Edmonton, AB June 6-9, 2013

New Dartmouth Blood Production and Distribution Site

Canadian Blood Services has completed construction on its new production and facility Dartmouth. distribution in The organization is now working to ensure the equipment and building systems meet all conditions and requirements for use and all documentation is in place. Health Canada will then be able to issue a license for the facility, which will allow Canadian Blood Services to move its Halifax and Saint John operations to the new facility.

The announcement of a move date is expected to be made later this year. At that time, blood collected from donor clinics held in the Maritime Provinces will be shipped to Dartmouth for processing into blood components (red cells, platelets, plasma, and cryoprecipitate). The finished products will then be shipped to hospitals in New Brunswick, Nova Scotia and Prince Edward Island.

As part of Canadian Blood Services' move plans, all hospitals will be provided with an information package that will include details on changes to phone and fax numbers and hours of operation. To assist during the transition from Canadian Blood Services' existing facilities to its new Dartmouth facility, hospital customers will be asked to increase their inventories just prior to the move date. These inventory increases will be similar to those initiated prior to a long holiday weekend, and will minimize the need to issue blood and blood products during the moves.

The Halifax functions will be moved first over one weekend, allowing the Saint John site to provide contingency backup during the move. Subsequently, the Dartmouth site will be fully operational over the weekend the Saint John functions are moved to the facility.

Need more information? If you have any questions on the new production and distribution site in Dartmouth, or any other topics relating to Canadian Blood Services, please contact:

Dorothy Harris Hospital Liaison Specialist Phone: 506-648-5054 Toll free: 1-888-992-5663 Cell: 506-647-1705 dorothy.harris@blood.ca



Cindy Stimson, Manager, Production and Ramona Coolen Assistant Manager, Production stand beside the new walk-in distribution coolers at the Dartmouth facility.

Nursing Blood Transfusion Competency via E-Learning

Nurses can now access education on blood transfusion 24/7 via the provincial online learning management system (LMS).

The Learning Management System (LMS) is the tool that HITS-NS uses for e-Learning. It enables the development, management and delivery of classroom and on-line learning, with associated reporting and compliance tracking capabilities.

Blood transfusion education was identified as one of the top ten priorities for standardized competencybased educational modules by the Nova Scotia Nurse Educator Group. The Nova Scotia Provincial Blood Coordinating Program (NSPBCP) completed three interactive modules on blood transfusion and will be responsible for revising the content.

Blood Basics Module Administration Module Adverse Reactions Module **Basic function** Consent **Types** ABO and Rh Signs and Symptoms Orders Compatibility IV access Management **Indications** Infusion Devices Reporting Investigation Storage Assessment

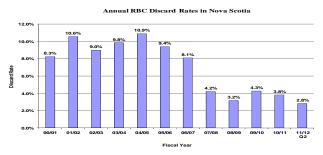
As you review the modules you will be presented with questions throughout the module. Once all of the modules are completed there is a final exam. In order to be considered successful you must obtain a score of 80 %. Answers can be reviewed upon completion and submission of the exam.

https://elearning.nshealth.ca is the URL for the provincial LMS. As you require a password to access the system, contact the clinical educator or resource nurse in your facility for assistance or contact me at peggy.wilson@cdha.nshealth.ca. CDHA is exploring the placement of these modules on its LMS system.

Peggy Wilson Transfusion Practice Coordinator

Nova Scotia Has Lowest Discard Rate In 12 Years!

The Nova Scotia Provincial Blood Coordinating Program (NSPBCP) supports excellence in transfusion medicine. As Nova Scotia ranks fourth in its per capita use of red blood cells in Canada (excluding Quebec), red blood cell discards is an area of focus. RBC discard rates were last reported by the NSPBCP in 2008/09. In order to insure that complete disposition data was available for analysis the NSPBCP, Canadian Blood Services and transfusion medicine quality specialists worked collaboratively to address gaps in disposition reporting. With this effort successfully completed analysis on the distribution and utilization of red blood cells in Nova Scotia from October 1, 2008 to September 30, 2011 was conducted. NSPBCP congratulates hospitals on achieving the lowest provincial discard rate of red blood cells in 12 years-2.8%!!!



The low discard rate was attributed to the following activities performed within the jurisdictions:

- improved inventory management
- quality improvement processes
- obtaining product with staggered expiration dates from CBS
- ordering in small numbers to avoid receiving more units with the same expiration dates,
- removal of the operating room refrigerator (prevented discard of units kept at the surgeon's side for more than 30 minutes)
- Review of MSBO's
- redistribution of units nearing outdate
- holding blood for one day instead of 2 to 4 days for surgical cases

We know these things only happen with a great deal of effort on the part of everyone, and your hard work is greatly appreciated. It is very exciting to be working with you on this and for us to all have the opportunity to make a difference. Keep up the good work.

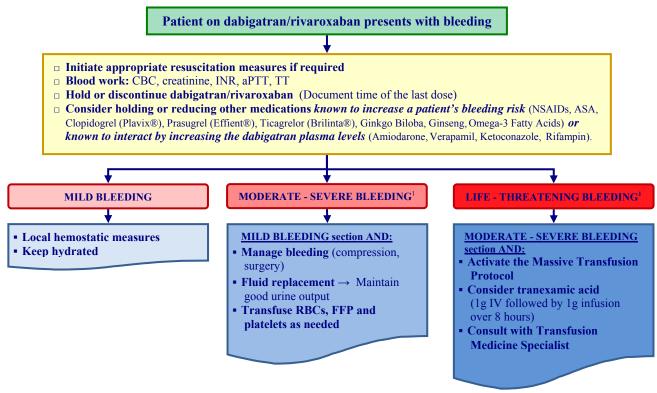
Tabassum Ata Quraishi, MBBS, MHA Utilization Management Coordinator

Managing the Bleeding Patient on the New Anticoagulants

Many patients have heralded the introduction of anticoagulants where monitoring of the INR is not required. While they have provided a convenience factor for patients, physicians have questioned how to treat patients should bleeding occur. To date, there is limited clinical data related to the reversal of dabigatran and rivaroxaban – no antidote is currently available. The NSPBCP was asked to provide recommendations for the care of patients on these medications in order to ensure blood components and blood products are used appropriately in these situations. The NSPBCP, in conjunction with an expert working group, is therefore providing the recommendations below for treatment of the patient taking these new anticoagulants in the event of a bleeding episode.

The anticoagulant effect of dabigatran or rivaroxaban will not be reversed by the administration of vitamin K or plasma infusion. Do NOT transfuse plasma to reverse an elevated aPTT or INR. There is insufficient evidence to recommend the use of rFVIIa (NiaStase®), Prothrombin Complex Concentrates (octaplex® or Beriplex®P/N) or FEIBA for the reversal of these medications. ⁴

In overdose situations without bleeding, activated charcoal may be considered for dabigatran and rivaroxaban. Hemodialysis may also be considered for patients with renal failure while taking dabigatran however rivaroxaban is not expected to be dialyzable.⁵



Moderate to severe bleeding – a reduction in Hgb ≥ 20g/L, symptomatic bleeding in an organ or critical area, e.g. intraocular, intracranial, intramuscular, retroperitoneal, intra-articular or pericardial bleeding. ¹

Life-threatening bleeding – a reduction in Hgb \geq 50g/L, symptomatic intracranial bleed, hypotension requiring inotropic agents, e.g. dopamine, bleeding requiring surgery ¹

The above algorithm will be revised as new evidence of treatment options become available.

References:

- 1. New Zealand Government, PHARMAC (Pharmaceutical Management Agency) http://www.pharmac.govt.nz/2011/06/13/Dabigatran%20bleeding%20management.pdf
- 2. Sunnybrook Medical Centre, 2011. Management of the bleeding patient receiving Dabigatran
- 3. Best Practice Journal, 2011. The use of dabigatran in general practice: a cautious approach is recommended http://www.bpac.org.nz/magazine/2011/september/dabigatran.asp
- 4. National Advisory Committee on Blood and Blood Products, 2011.
- 5. Janssen Pharmaceuticals, Inc., 2011 Xarelto® Product Monograph
- 6. Government of Saskatchewan, 2012. Directive on the care of the Patient with Bleeding on Dabigatran Therapy

Sue Cairns