ADMINISTRATION OF IV DDAVP FOR PROCEDURES

DDAVP or desmopressin is a synthetically produced form of the hormone vasopressin, which has proven effective in the treatment of mild hemophilia A (Factor VIII deficiency), and certain types of Von Willebrand's Disease. When given intravenously, DDAVP has been shown to cause a temporary increase in the Factor VIII and Von Willebrand levels which may stop bleeding in patients with minor bleeds such as hemarthrosis, hematomas or mucosal bleeding it has also proven effective to prevent bleeding during minor surgical procedures and dental work.

Not all patients with mild hemophilia A or Von Willebrand disease respond to DDAVP. Therefore it is preferred that patients receive a trial dose upon diagnosis to determine the drug's future effectiveness to control bleeding in the particular patient. DDAVP's action is thought to increase the release of Factor VIII and Von Willebrand protein from their storage sites in the subendothelium. Because DDAVP is **not** a blood product the risk of exposure to blood borne viruses is eliminated. IV DDAVP is considerably less costly than factor concentrates or blood products.

*DDAVP should be administered 30 minutes prior to an invasive procedure in order to achieve maximum effectiveness. (If using STIMATE, administer 60 minutes before procedure)

*Administer DDAVP IV over 20-30 minutes in 50 mls of only normal saline. The dosage is 0.3 mcg/kg.

*Monitor blood pressure at start and completion of infusion. Facial flushing usually occurs. There may be a slight rise in blood pressure and some patients will complain of headaches, which are transient. Other infrequent side effects include nausea, abdominal cramping and vulval pain.

*Because of vasopressin's antidiuretic effect water retention and hyponatremia can occur. Patients should be instructed not to consume excessive fluids for 24 hours following the use of DDAVP.

*There is some tachyphylaxis response following repeat administration due to depletion of the patient's endogenous stores of Factor VIII and Von Willebrand protein. For this reason DDAVP becomes somewhat less effective after two or three doses given at 24 hour intervals. If three doses are insufficient to provide hemostasis the Hemophilia Treatment Center or appropriate care facility should be notified.

For tonsillectomies and/or adenoidectomies follow-up doses of DDAVP may be recommended. These doses can be given intranasally with STIMATE only. The recommended schedule is to administer STIMATE on day 1 and 2 and then again on day 6 and 7. The dose is one squirt in one nostril if <50 Kg for a total dose of 150 mcg and one squirt in each nostril if >50 Kg for a total dose of 300 mcg.

For nose, mouth or mucus membrane bleeding Amicar should be used in conjunction with the above recommendations. Amicar (aminocaproic acid) is an antifibrinolytic and is effective in the prevention of normal clot lysis ensuring the stability of the clot. The dose is 100mg/Kg every 6 hours for children with a maximum dose of 6 grams every six hours for an adult. It should always be given prior to dental work and teeth extractions. It is supplied in IV, liquid and tablet form and may also be used as a mouthwash.

If there are further questions regarding the administration of DDAVP please contact Dr. Carol Diamond: Pediatric Hematology (608) 265-5399, Dr. Eliot Williams: Hematology (608) 263-1836 or Karmin Enge RN, Hemophilia Nurse Coordinator: (608) 227-1254. For assistance after hours, call the UW hematologist on call (608) 262-2122.

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