

## DDAVP Challenge

### What is Desmopressin (DDAVP)?

- Desmopressin or DDAVP is a medicine used to treat several different conditions including some bleeding disorders such as mild hemophilia A (factor VIII deficiency), von Willebrand Disease (VWD), and some platelet function disorders.
- DDAVP is synthetic, but it is similar to a hormone the body makes called vasopressin. It can be administered intravenously (IV, in a vein), intranasally (IN, nose spray) and in some cases subcutaneously (SQ, under the skin).
- At the right dose, DDAVP causes the body to secrete more von Willebrand Factor (VWF) and factor VIII (FVIII) from cells into the blood stream. It also increases the activity of platelets.
- While many patients respond to DDAVP and are able to use it to treat or prevent bleeding symptoms, not everyone responds. A **DDAVP challenge** is performed to test how well an individual responds to DDAVP and to determine whether it can be used as part of a patient's bleed management and prevention plan.

### What is the DDAVP Challenge?

- This is a test of how well your coagulation factors (FVIII or VWF) respond to IV or IN DDAVP.
- Depending on your bleeding disorder, different tests of response will be checked before and after you receive the DDAVP. For individuals with VWD, VWF levels are checked, and for those with hemophilia A, FVIII levels are checked.
- The DDAVP challenge is typically completed in one of our outpatient infusion areas (CAT/CR), such as at Boston Children's Main (Longwood) or at Boston Children's Waltham.
- Your primary hematology team will help you to schedule your DDAVP challenge.

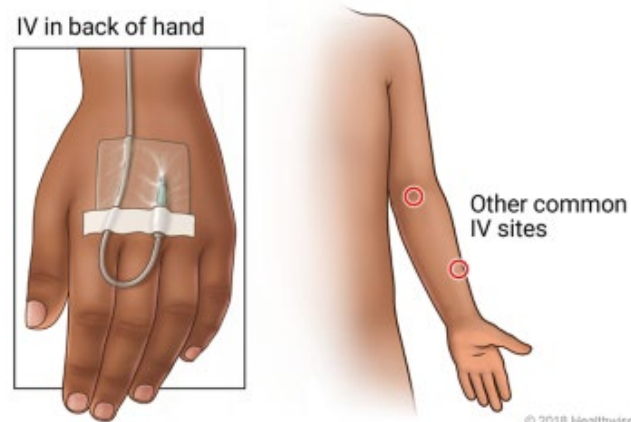
### Does DDAVP have any side effects?

<u>Common side effects</u>	<u>Uncommon, but serious side effects</u>
<ul style="list-style-type: none"> <li>• Facial flushing (most common)</li> <li>• Headache</li> <li>• Nausea</li> <li>• Changes in blood pressure</li> <li>• Abdominal cramping</li> <li>• Feeling tired or weak</li> <li>• Restlessness</li> </ul>	<ul style="list-style-type: none"> <li>• This drug can cause low sodium (salt) levels.</li> <li>• Very low sodium levels can be life-threatening, leading to seizures, passing out, trouble breathing.</li> <li>• Allergic reaction can occur including rash, hives, itching, red, swollen, blistered, or peeling skin, trouble breathing, swallowing, or talking, swelling of the mouth, face, lips, tongue, or throat.</li> </ul>



## What can I expect on the day of the DDAVP Challenge?

1. Basic vitals signs and a weight will be obtained.
2. An IV will be started for blood draws and DDAVP administration (infusion).
3. Baseline blood samples will be collected through the IV (*pre-DDAVP samples*).
4. DDAVP will be infused through the IV over a period of about 30 minutes.
5. More blood samples will be obtained about 30-60 minutes after the DDAVP infusion is complete (*post-DDAVP samples*).
6. For some individuals, generally those with type 1 or type 2 VWD, additional blood samples will also be drawn about 4 hours after completion of the DDAVP infusion.
7. Results of the *post-DDAVP* blood samples will be compared to *pre-DDAVP* samples to determine if you will be considered a “DDAVP responder” or a “DDAVP non-responder”
8. Some laboratory tests are only run a few times per week (not everyday), so the results of your DDAVP challenge will not be immediately available.
9. Your primary team will follow-up with you either by phone or a hematology clinic visit to discuss the results and make a bleed management plan with you.
10. For 24 hours after receiving the DDAVP you/your child should eat and drink normally. Please avoid being out in very hot weather, having significant increase in physical activity, or changing the usual amount of water that you drink. Drinking too much plain water after receiving DDAVP can cause potentially dangerous lowering of your sodium (salt) levels.



### Helpful Contact Numbers:

CAT/CR Schedulers: 617-355-6235

Hematology Schedulers: 617-355-8246

### Helpful Websites & Educational Resources

Boston Bleeding Disorders Center [www.childrenshospital.org/programs/boston-bleeding-disorders-center](http://www.childrenshospital.org/programs/boston-bleeding-disorders-center)

National Bleeding Disorders Foundation [www.hemophilia.org](http://www.hemophilia.org)

New England Hemophilia Association [www.newenglandhemophilia.org](http://www.newenglandhemophilia.org)

World Federation of Hemophilia [www.wfh.org](http://www.wfh.org)

HemAware [www.hemaware.org](http://www.hemaware.org)

LA Kelley Communications [www.kelleycom.com](http://www.kelleycom.com)



Pediatric Bleeding Disorders Program

300 Longwood Ave., Fegan 6, Boston, MA

Phone: 617-355-6101 | Fax: 617-730-0641