

DESMOPRESSIN (DDAVP)

What is desmopressin?

Desmopressin (also known as DDAVP, which stands for 1-deamino-8-D-arginine vasopressin) is a synthetic medicine that boosts levels of factor VIII (FVIII) and von Willebrand factor (VWF) to prevent or control bleeding. It costs much less than plasma products and carries no risk of transmission of viral infections.

Who can use desmopressin?

- DDAVP may be the treatment of choice for patients with mild or moderate hemophilia A and type 1 von Willebrand disease (VWD).
- It is particularly useful in the treatment or prevention of bleeding in carriers of hemophilia.
- DDAVP may also be useful to control bleeding and reduce the bleeding time in some congenital platelet disorders.
- DDAVP is frequently used for dental procedures and minor surgeries.
- DDAVP does not affect factor IX (FIX) levels and is not used to treat hemophilia B

How is desmopressin used?

DDAVP is only used in patients that have some level of FVIII or VWF in their plasma. Although DDAVP is given subcutaneously in most patients, it can also be administered by intravenous infusion or by nasal spray. Common preparations include:

- 4 μg/ml for intravenous use
- 15 μg/ml for intravenous and subcutaneous use
- 150 μg per metered dose as nasal spray

Does desmopressin have side effects?

As with all drugs, using DDAVP carries the risk of some side effects. The most common is a temporarily red or flushed face. Headaches, dizziness, and mild stomach pain sometimes occur. DDAVP makes the body retain fluids so it is necessary to reduce fluid intake during treatment.

Due to water retention, DDVAP should be used with caution in young children and is contraindicated in children under two years of age.

Each patient's response should be tested prior to therapeutic use, as there are significant differences between individuals. The response to intranasal DDAVP is more variable and therefore less predictable.

More about desmopressin

- DDAVP has been used since 1977 to treat patients with bleeding disorders.
- The World Health Organization's (WHO) Model List of Essential Medicines (EML) includes DDAVP.
- DDAVP has been approved by regulators in many countries including in Africa, Asia, Europe, North America, and South America.
- Over 70 DDAVP products are manufactured or available in over 50 countries.
- The cost of treatment with DDAVP is significantly lower than treatment with clotting factor concentrates.

For more information (available for free download from www.wfh.org/publications)

- 1. <u>Mannucci, P.M. Desmopressin (DDAVP) in the Treatment of Bleeding Disorders Treatment of Hemophilia No 11, WFH, 2012.</u>
- 2. <u>Guidelines for the Management of Hemophilia</u>, 2nd edition (page 41)

 <u>Prepared by the Treatment Guidelines Working Group, on behalf of the World Federation of Hemophilia</u>, WFH, 2012.