Desmopressin (DesmoMelt®)

Why has my child been prescribed Desmopressin?

Desmopressin is used to help treat bedwetting (sometimes called nocturnal enuresis)

How does Desmopressin work?

When we go to sleep we normally make more of a hormone called vasopressin. This hormone has an antidiuretic effect. That is, it tells the kidneys to make less urine (wee). Therefore, if we make more vasopressin when we are asleep, our kidneys will make less urine (wee), so that our bladder can then hold all the wee made during the night. That is why most people can sleep all night without needing to have a wee.

Some children do not produce enough vasopressin. These children make almost as much urine (wee) during the night as they do during the day. Because of this the bladder is full before the morning. The child then has to wake up and go to the toilet or, if they are not able to wake up to the full bladder signals, as is the case for most children, their beds get wet while they are asleep.

This large amount of urine production at night is sometimes called nocturnal polyuria.

Desmomelt® is a form of desmopressin which has been used to treat bedwetting in both children and adults since the 1980s. It acts like vasopressin, reducing the volume of urine produced at night. For children who respond to treatment, the night-time urine production reduces to normal levels. The child’s bladder is then able to hold all the urine until the morning, so that the child can stay dry while they sleep.

What is different about DesmoMelt®?

DesmoMelt® has been designed to build on the effectiveness and safety of the tablet form of Desmopressin - Desmotabs®. Unlike a tablet, DesmoMelt® does need to be swallowed with water. When it is put in the mouth it dissolves immediately into the saliva. The DesmoMelt® is absorbed from the mouth, pharynx (throat) and oesophagus (food pipe) as the saliva passes through to the stomach. This means more of the medication is absorbed (enhanced bioavailability), and therefore the Melt can be given in a lower dose than the tablet.

Children usually find DesmoMelt® easier to take than a tablet, as they do not need to swallow it and do not need to have a drink with it.

What are the contraindications (who should not take Desmopressin)?

Children under the age of 5 years and adults over the age of 65 years should not take Desmopressin for bedwetting. Desmopressin is also not advised for children who have cardiovascular (heart) disease or who take diuretics (medications that help the kidneys produce more urine).

What precautions are there (what special care should be taken when using Desmopressin)?
Care should be taken when using Desmopressin for children who have reduced renal (kidney) function, cardiovascular (heart) disease, or cystic fibrosis. If your child has one of these conditions you should discuss whether Desmopressin is suitable for them with their paediatrician (consultant) before giving it.

Drinks should be stopped 1 hour before taking Desmopressin and for 8 hours afterwards. Desmopressin should not be taken during any illness, including diarrhoea and/or vomiting, or if the child has a raised temperature.

If your child has drunk a large amount of fluid (including during swimming,) or is likely to drink alcohol (teenagers) before going to bed, then Desmopressin should not be given on that night. Desmopressin works by reducing the amount of urine produced. If the child has a large fluid intake (drinks lots) in the evening and then takes Desmopressin, the extra fluid will not be able to be passed out of the body. It will accumulate in the cells, causing fluid retention (sometimes called hyponatremia). Hyponatremia is a serious medical condition. It can be avoided by ensuring you child does not have anything to drink in the hour before and eight hours after taking Desmopressin, as advised.

What if my child is taking other medicines?

If your child is taking any other medicines you should always discuss this with your doctor or nurse before giving them Desmopressin. Medicines to be particularly careful about include:

- Tricyclic antidepressants, chlorpromazine and carbamazepine. All of these may cause an additional antidiuretic effect. That is they may reduce urine production further, leading to an increased risk of water retention and/or hyponatremia.

- Loperimide (Imodium). When taken with Desmopressin it may cause a threefold increase in the concentration of the Desmopressin in plasma. This means there is an increased risk of water retention and/or hyponatremia. It is thought that other drugs which slow gut transit may have the same effect.

What is the dose of DesmoMelt®?

DesmoMelt® is for sublingual use (it should be placed in the mouth just under the tongue). The starting dose is 120 mcg. Children should be reviewed the following week to check their progress and the dose can be increased to 240 mcg if they are still having some wetting. DesmoMelt® comes in two strengths, 120mcg and 240mcg. Children should never have more than a total of 240mcg per night. It must only be used at night.

How long can my child take Desmomelt®?

The need for continued treatment should be reassessed every 12 weeks. This is done by having a week without taking DesmoMelt®. If the child is wet for two or more nights in the week without DesmoMelt® it can be restarted for a further 12 weeks. This three monthly cycle can continue for as long as necessary. In practice most children need continued treatment for 6-12 months, but they can stay on it for years if necessary. If DesmoMelt® does not work, you should discuss other treatment options with your healthcare professional. Some children need other treatment instead of, or at the same time as Desmopressin.

As with all medication it is important that you always read the information sheet which comes with DesmoMelt® and that you contact your health care professional if you have any concerns.

Further information can be obtained from your pharmacist, healthcare professional or Bladder and Bowel UK.
www.bladderandboweluk.co.uk
Helpline: 0161 607 8219

2013 (revised and updated 2017)