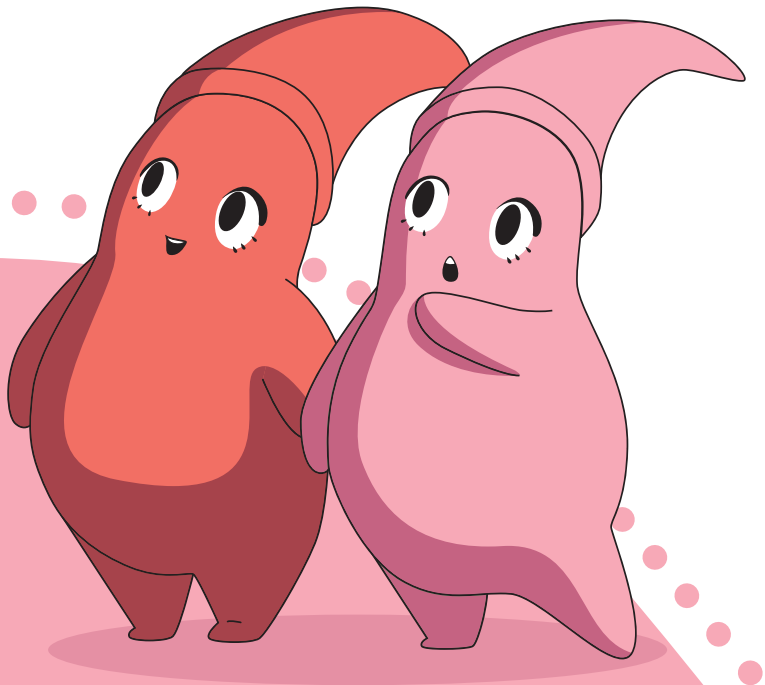
ANZSPED
AUSTRALIA AND NEW ZEALAND SOCIETY FOR PAEDIATRIC ENDOCRINOLOGY AND DIABETES

Want to know more about

Arginine vasopressin deficiency (AVP-D)



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What is Arginine vasopressin deficiency (AVP-D)?

AVP deficiency is due to a lack of a hormone called Arginine vasopressin, also known as antidiuretic hormone (ADH). ADH is made in a part of the brain called the hypothalamus and then released into the blood by the posterior pituitary gland. When there is not enough ADH, the kidneys cannot concentrate urine.

Words to describe this condition:

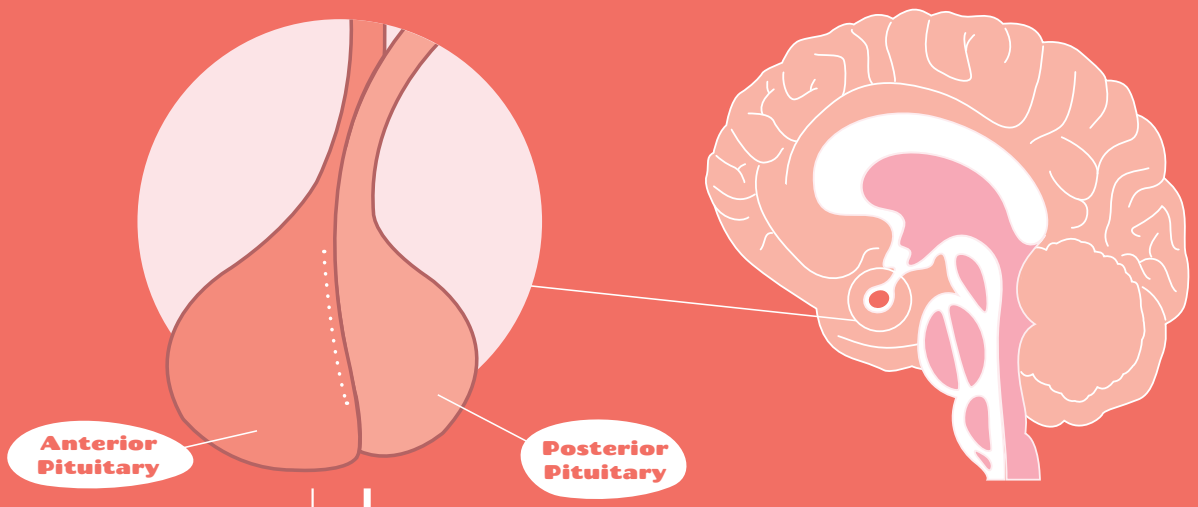
Arginine vasopressin deficiency (AVP-D) has also been called:

- Antidiuretic hormone (ADH) deficiency
- Central diabetes insipidus

Note:

Diabetes insipidus is different from diabetes mellitus, which is a problem with blood sugar control rather than fluid balance.

Pituitary Gland



Hormones

ADH → Kidney → Water Balance

TSH → Thyroid → Thyroxine

ACTH → Adrenal Gland → Cortisol, Androgens, Aldosterone

GH → All Body Parts → IGF-1

LH
FSH → Ovary → Oestrogen, Progesterone

LH
FSH → Testis → Testosterone

Prolactin → Breast

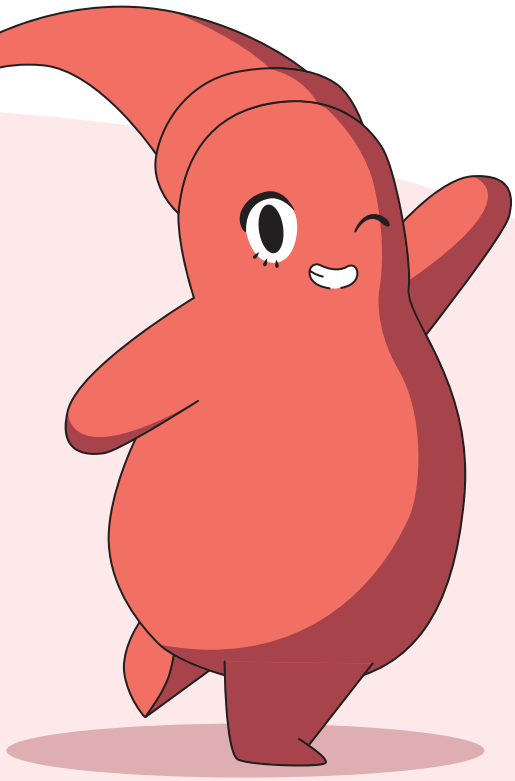
What causes AVP deficiency?

A child can be born with AVP deficiency (also called congenital AVP deficiency, which sometimes runs in families), and is sometimes only noticed when the child is older. Or AVP deficiency can develop in childhood (also called acquired AVP deficiency).

Acquired AVP deficiency can be due to a range of causes, e.g. from operations affecting the pituitary gland, head injury, or brain tumours.

What are the symptoms of this condition?

- Passing large amounts of dilute urine.
- Increased thirst, particularly overnight.
- Other symptoms may be present depending on the underlying cause.



How is it diagnosed?

Your doctor will discuss your child's symptoms and review your child. Blood and urine tests are used to help confirm this diagnosis and additional tests e.g. medical imaging may be required.

How is it treated?

Treatment is with a medication to replace the AVP. This can be given in different ways including tablets or nasal sprays. Your doctor can advise you on the best way to take this treatment. A fluid target may also be recommended.

What monitoring is required during treatment?

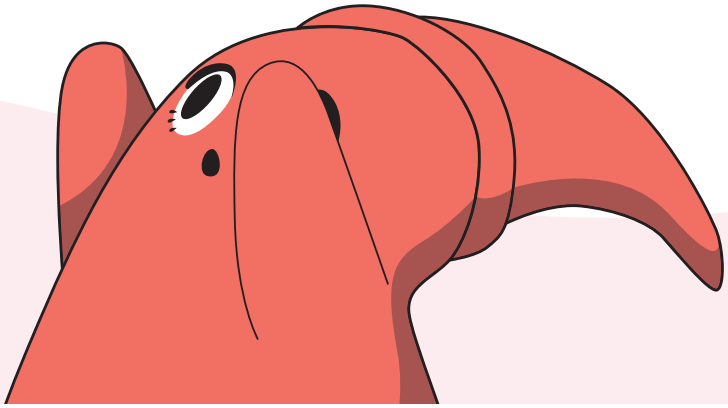
Close monitoring, including blood tests to assess salt levels are needed. During illness or surgery more frequent testing may be required. Your team will adjust medication doses as necessary.

What are the side effects of treatment?

Taking too much of this medication can cause fluid overload or low salt (sodium) levels in the blood. Too little of this medication can cause dehydration or high salt (sodium) levels in the blood. Symptoms of low salt levels can include lethargy or seizures, and high salt levels can cause thirst or other symptoms.

Disclaimer

This leaflet has been written by members of ANZSPED. It is designed to give you some general information about your child's condition and treatment. If you have any questions about your child's condition and treatment, it is best to speak to your child's doctor or specialist nurse.



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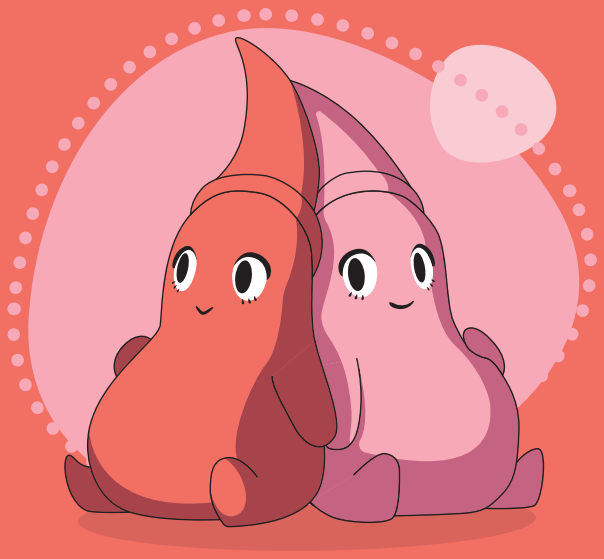

Remember

Regular medication is important to maintain your child's fluid balance, and close review with your medical team is essential.

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