

# Diabetes Insipidus

## Treatment:

### Medical:

- ADH Replacement Therapy
- Adequate Fluid Replacement
- If Nephrogenic, other medical treatment will be needed

### Pharmacologic:

- Desmopressin (DDAVP)
- Chlorpropamide (Diabinese)
- Thiazide Diuretics

## Polydipsia & Polyuria



## Pathophysiology:

This is the most common disorder of the posterior lobe of the pituitary and is characterized by a deficiency of vasopressin or ADH (Antidiuretic Hormone). This disorder is caused by a hormonal abnormality and is NOT related to diabetes. It results in a disorder of salt and water metabolism marked by great thirst and extreme urinary output due to the kidney inability to prevent the excretion of water.

## Etiology:

Several causes of DI are possible. Normally, when your kidneys filter your blood, only a small amount is excreted as urine. ADH, produced by the hypothalamus and stored in the pituitary gland, controls how much urine is excreted by the kidneys and when ADH is not present (Central DI) or the kidneys do not react adequately to the ADH (Nephrogenic DI), excessive excretion occurs.

## Labs and Diagnostics:

- Fluid Deprivation Test
- Plasma and urine osmolality studies
- ADH Plasma Level Tests
- Desmopressin Therapy
- Imaging, CAT or MRI to check for a tumor

## Central DI:

- Caused by damage to the hypothalamus or pituitary gland

- Genetics
- Head Trauma
- Infection
- Loss of Blood supply to the pituitary
- Surgery
- Tumor

## Nephrogenic DI:

- Caused by a defect in the kidneys

- Genetics
- Drugs - Lithium
- Infection
- High levels of serum calcium



## Nursing Interventions:

Top priority for nurses are physical assessment and patient education. Fluid Management, and pharmacologic management as ordered are also key during home care or hospitalization.

**Patient Education:** Pt, Family and/or caregiver must be educated about follow-up care, complication prevention, and emergency care. When give verbal directions, the nurse must be specific and clear in the directions and give written instructions on medications, including the dose, actions, side effects and the S/S of hyponatremia (low levels of serum sodium). The nurse should advise the patient to wear a medical bracelet, and carry meds and DI info at all times.