prevent dehydration.

Nursing Alert

Children with diabetes insipidus (DI) complicated by congenital absence of the thirst center must be encouraged to drink sufficient quantities of liquid to prevent electrolyte imbalance.

Diagnostic Evaluation

The simplest test used to diagnose this condition is restriction of oral fluids and observation of consequent changes in urine volume and concentration. Normally, reducing fluid intake results in concentrated urine and diminished volume. In DI, fluid restriction has little or no effect on urine formation but causes weight loss from dehydration. Accurate results from this procedure require strict monitoring of fluid intake and urinary output, measurement of urine concentration (specific gravity or osmolality), and frequent weight checks. A weight loss between 3% and 5% indicates significant dehydration and requires termination of the fluid restriction.

Nursing Alert

Small children require close observation during fluid deprivation to prevent them from drinking, even from toilet bowls, flower vases, and other unlikely sources of fluid.

If this test result is positive, the child should be given a test dose of injected **aqueous vasopressin**, which should alleviate the polyuria and polydipsia. Unresponsiveness to exogenous vasopressin usually indicates nephrogenic DI. An important diagnostic consideration is to differentiate DI from other causes of polyuria and polydipsia, especially DM. DI may be the early sign of an evolving cerebral process (De Buyst, Massa, Christophe, et al, 2007).

Therapeutic Management

Treatment for DI requires hormone replacement using vasopressin. Vasopressin is administered by intramuscular or subcutaneous