

Medical Alert on Antidiuretic Hormone

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Antidiuretic hormone is a substance normally secreted by the pituitary gland; its function is to prevent elimination of liquid from the body. Lack of this hormone can be one cause of nighttime enuresis (bedwetting), which is a common occurrence in Prader-Willi syndrome, and medication that boosts the hormone level can help resolve this problem. An excessive amount of antidiuretic hormone, on the other hand, can stop all urination, diluting the body's electrolytes with retained fluids and setting off nervous system reactions such as seizure or coma. Several recent parent reports highlight the importance of careful dosage of medications that affect this hormone and monitoring of fluid intake and possible side-effects in conjunction with their use.

DDAVP

DDAVP (desmopressin acetate) Nasal Spray is a synthetic version of antidiuretic hormone, sold by prescription to treat bedwetting in children age 6 and older. Although it has been successfully used in some children with PWS, Diana Baker from Virginia asked us to alert members that her teenage daughter with the syndrome ended up in a coma-like state after three consecutive nightly doses of DDAVP. (The drug is typically used nightly for four to six weeks in a controlled-dose spray, and side-effects in the general population are usually nonexistent or mild.) When the prescribing doctor checked with Dr. Jeanne Hanchett, who had recently seen the young woman at the Rehabilitation Institute of Pittsburgh, it was discovered that Dr. Hanchett had seen a similar reaction in another patient with PWS and that the drug manufacturer had a third case on record. It's likely, Dr. Hanchett says, that at least some people with PWS may have a lower tolerance for DDAVP and require either an adjusted dosage or a different solution to the enuresis problem. Diana's daughter, by the way, recovered slowly but completely once the drug was stopped.

(Note: DDAVP is manufactured in Sweden for Rhône-Poulenc Rorer Pharmaceuticals Inc., 500 Arcola Rd., Collegeville, PA 19426.)

Haldol

In the recent issue of *Wavelength*, the international PWS parent newsletter, a father wrote about his 26-year-old son, who had suffered convulsions and a coma after several months' treatment with Haldol (haloperidol) for psychiatric symptoms. On further investigation, it was learned that the young man had been for some time drinking more water than usual, though not an amount that would normally cause problems. Professor Martin Ritzén of the Pediatric Endocrinology Unit, Karolinska Hospital, Stockholm, Sweden, commented, "It is known that in rare instances [haloperidol] can cause an oversecretion of antidiuretic hormone which prevents the kidney [from] getting rid of excess water. For a person with PWS who might decide to drink in order to reduce eating this might cause water intoxication as in [this] case." He speculates that people with PWS "may have a slightly deranged regulation of the antidiuretic hormone," noting the abnormalities in many other functions regulated by the hypothalamus—appetite control, temperature, pain threshold setting, and secretion of growth hormone and gonadotropins. "In

any case, PWS patients on haloperidol should be supervised as to their water consumption," Ritzén concludes.
