

## **Oxytocin for patients with pituitary dysfunction?**

The pituitary secretes several hormones; most of which are tested for and possibly replaced if a patient has pituitary dysfunction. The anterior pituitary makes ACTH that controls cortisol, TSH that controls thyroid hormone, growth hormone that controls IGF-I, LH and FSH that control testosterone and estrogen, and prolactin that is involved in milk production. The hypothalamus makes arginine vasopressin, which is also called anti-diuretic hormone (ADH), which controls water re-absorption in the kidney and determines serum sodium levels. It also makes a hormone called oxytocin that is well known for its role in labor and delivery. These hormones are transported to the posterior pituitary where they are stored and released when needed. Either hypothalamic or pituitary dysfunction can affect release of the posterior pituitary hormones. With the exception of prolactin and oxytocin, we routinely measure these hormones in patients with pituitary dysfunction and correct them, if they are low.

Oxytocin is a very interesting hormone and may have a physiologic role besides its role in labor and delivery. There is some literature that shows that oxytocin is involved in bonding, especially in females but possibly also in males. It may also help control pain, help with intimacy and achieving orgasm and also help with issues of trust. It may also help with energy and confidence and abdominal pain and other symptoms of GI discomfort. It may help with preventing social withdrawal. Its levels in patients with pituitary dysfunction and whether it would be beneficial for the patient to have oxytocin replaced if their levels are low, has not been assessed.

Dr. Friedman has developed a questionnaire that will measure symptoms that could be related to oxytocin deficiency and is instructing his patients to have a 24-hour urine oxytocin level done at Meridian Valley labs. If that is below the range, he will then prescribe oxytocin nasal spray from Bellevue Compounding Pharmacy for three months and repeat the questionnaire and the 24-hour urine measurement of oxytocin at that time.

Dr. Friedman hopes that the oxytocin does provide benefit for his patients. Patients with more complete hypopituitarism, including those with Diabetes Insipidus (arginine vasopressin deficiency) are more likely to have low levels and benefit from replacement. Please note that this is not a true clinical study and patients or their insurance will be responsible for the costs of the testing and oxytocin. However Dr. Friedman wants to systematically observe the effects of oxytocin in patients with pituitary dysfunction. If you are a current patient of Dr. Friedman's and would like to have your oxytocin tested and if low, replaced, please contact his office by email. If you are not a current patient, we will need to see you first before we can administer the questionnaire and order the urine test.

For more information about Dr. Friedman's practice or to schedule an appointment, go to [www.goodhormonehealth.com](http://www.goodhormonehealth.com) or email us at [mail@goodhormonehealth.com](mailto:mail@goodhormonehealth.com).