



## Endocrinology

Before we understood the organs involved, the effects of the endocrine system must have seemed like a kind of magic. What single body part could cause a patient to suddenly begin drinking lots of water, developing fungal rashes, lose weight, and breathe the scent of rotten fruit? Was it a curse? Was it a sign of poor character? In Chinese medicine, such a malaise would be explained as kidney *yang* fire (personal communication with Ken Lowry, L.Ac., DOM). In Ancient Greece or in Renaissance times, such a patient might have been described as “phlegmatic”—an overabundance of coldness and wetness.

Today, although we know what the glands do, and, for the most part, what leads them astray, belief in the endocrine pathways and their communications between patient and environment still requires a certain leap of faith. Thunder claps unexpectedly and somehow our hearts are racing; in a family of diminutives, one child grows to become a giant: the cause and effect relationship is much less linear than the dyspnea associated with COPD or the gait instability that comes from breaking an ankle. At the very least, it requires that we trust in a game of physiological “Operator,” in which the hypothalamus whispers instruction to the pituitary to pass on to the thyroid, and the assumption that the message will not end up lost in translation.

In this issue of *OFP*, we will follow these winding roads both from an internal and a behavioral perspective. Because we often best learn about a body system by reviewing the impact of its anomalies, we will hear from Cara O’Shaughnessy, DO, as she discusses insulinoma, and from Dennis L. Eckels, DO, and his description of “An unusual presentation of multiple endocrine neoplasia 1.”

Both Adarsh Gupta, DO, and Jay Shubrook, DO, FACOFP, look at modifications in the patient’s environment that can impact the biological process of diabetes. Dr. Gupta reviews the impact of weight loss on risk reduction and

glycemic control, and Dr Shubrook explores the role of a primary care registry in evaluating risk adjustment in management of patients with diabetes. The patient’s own role is reviewed by Peter Zajac, DO, in his patient education hand-out on “Diabetes and Exercise.”

The reader’s own adrenal system will get a boost when we discuss spiders and snakes: John Ashurst, DO, reviews serpent bites in a new article, and we remember an older article on arachnids as John Kemerer, DO, and John Ashurst, DO, discuss it in the “Letters to the Editor” section.

Joe Kingery, DO, brings *OFP* readers a procedural article in his step-by-step “Endometrial biopsy,” which includes a discussion about reproductive endocrinology. The *OFP* editorial committee hopes to bring more and more office-based surgical instruction to our readership, and we continually welcome such submissions to our journal.

At the end of the day, endocrinology is one more conversation about the rule of the artery, about our global physiological delivery system. When A. T. Still writes about goiter, he is mainly interested in the implications of somatic dysfunction of the first rib and manner in which impaired circulation to the thyroid can lead to compromise of the structure, and ergo function, of the end organ. And when diabetes is most out of control, it is the vascular system of the eyes, kidneys, and extremities that bear the brunt of the damage.

No matter what interventions—manual, behavioral, or pharmacological—we use to manipulate the hypothalamic system, to charge our adrenals, or to measure the serum glucose levels, these are only as good as the vessels that carry the message and only as useful as the health we find in the message recipients. Take note of that and pass it on!

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