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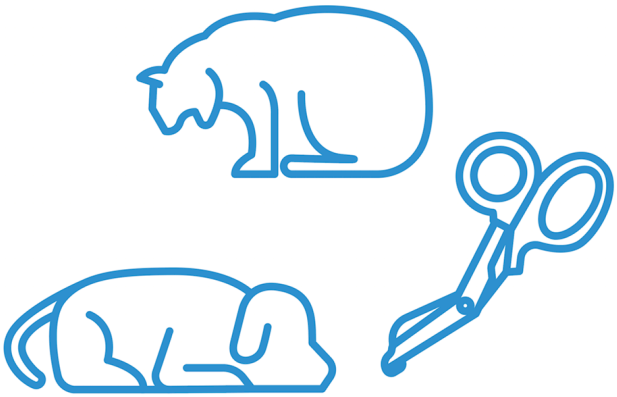

Endocrine Emergencies for Veterinary Technicians

micro drip study guide

version 1

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Be advised that this document is intended to enhance your learning experience. It is created primarily from an audio transcription of the instructor's lecture. Therefore it is NOT designed to meet the standard of a textbook or proceedings. Please excuse minor grammar and typographical issues. You are welcome to print and use it for notetaking and strengthening your learning.

Hormone	Gland	Function
Adrenaline	Adrenal	Increases BP/HR and metabolism in response to stress
Aldosterone	Adrenal	Balances sodium and water balance
Cortisol	Adrenal	Responds to stress
Estrogen	Ovary	Female hormone; pregnancy, sex, etc
Glucagon	Pancreas	Increases BG levels
Insulin	Pancreas	Decreases BG levels
Melatonin	Pineal	Controls sleep-wake cycles
Oxytocin	Pituitary	Lactation and delivery
Parathyroid	Parathyroid	Controls calcium levels
Progesterone	Ovary	Prepares body for pregnancy
Testosterone	Ovary, Testicle, Adrenal	Helps with sex drive and body destiny
Thyroid	Thyroid	Controls rate of metabolism and energy levels

This is a big chart. I know that. If you want this chart broken out, just message me, and I can send you just this chart. But I do like the way that it's laid out. It's easy to remember. For any of you, I saw someone brand new, IM tech; if you're ever thinking about becoming a VTS in internal medicine or even emergency medicine, you're going to want to know this stuff. So the hormone and the gland, and what is the function?

So the adrenal gland, that's an easy one because adrenaline, adrenal. So we know when you have an adrenaline rush, we're thinking about increases in your blood pressure, heart rate, and metabolism in response to some stress. It also produces aldosterone, so this balances your sodium and your water balance. Cortisol, also, we're going to talk about this, also responds to stress. Ovaries, obviously, estrogen, we think about female hormones, pregnancy, sex, things like that.

Pancreas, we've got the two big ones: glucagon and insulin. There's another one called somatostatin, but the two big ones that we're going to talk about, we see increases in blood glucose levels, we've got glucagon. Decreases in blood glucose levels; we've got insulin to help with that. Pineal, this is your melatonin, your sleep-wake cycles. We know because sometimes, for those of us who work overnight shifts in the emergency room, I've tried melatonin. I swear, I didn't do anything for myself. But I'm like, I'm going to take this melatonin. I'm going to sleep like a baby. I don't feel like it helps, but I tried it anyway.

Pituitary, oxytocin in lactation and delivery. Parathyroid. Parathyroid hormone, that's an easy one, controls calcium levels. Ovaries, so progesterone. It helps prepare the body for pregnancy. And then, testosterone is found in the ovary, the testicle, and the adrenal gland. Yeah, it helps with the sex drive and your body destiny, whatever you're going to be. The thyroid controls your metabolism and your energy level.