

When A Patient Goes Wild With Progesterone – Now What?

There are times when a patient is so happy to feel the positive effects of progesterone that, unbidden, they increased their use beyond your recommendations. Or perhaps a patient has found you because they have heard of progesterone and used it but used too much and now feels worse. Or a new patient may have been prescribed a high dose protocol, but symptoms have increased.

Cells can increase and decrease their sensitivity to progesterone by regulating the number of their receptors. Up regulation is the increase in number of cell receptors and down regulation is the opposite. Up regulation is used by cells to increase their sensitivity to a specific hormone. Up regulation occurs when a cell produces more receptors, the cell decreases its degradation of receptors, or by activating already present receptors.

Cells typically up regulate when the concentration of a hormone is very low. If there is a lower concentration of a hormone in the blood stream and the cell increases the number of receptors, it increases the chances of interacting with that hormone (sensitivity). Hormones themselves can also cause cells to upregulate. Down regulation is when a cell decreases its sensitivity to a hormone by decreasing the number of available receptors. Down regulation of progesterone receptors can occur when receptors have been chronically exposed to an excessive amount of a progesterone – most often from over use and unmonitored use of a topical progesterone product. The overuse results in ligand-induced desensitization or internalization of that receptor.

Hormone clearance is the process of lowering hormone levels in the blood through two mechanisms: first, through decreased secretion of a hormone and/or second, through increased degradation of a hormone.

Hormones can be broken down in three main ways:

- by the target cells by the enzymes that remove the hormones from receptors,
- by degradation in the blood,
- by transport to the liver for metabolization.

All three of these steps leads to excretion from the body via bile (steroid hormones) or via urine by the kidneys (metabolites).

A patient susceptible to too much progesterone could experience the following:

- Weight fluctuations, drowsiness, depressed feeling but not overt depression, slight dizziness, waking up groggy or “on edge” – which could all come from overstimulation of GABA.
- Physical discomfort including bloating, leg pain, water retention, spinning sensation Changes in libido, anxiety levels or just not feeling “like themselves”

Excess hormone which cannot be detoxified immediately by the liver will be stored in tissue. Steroid hormones are lipophilic and will be stored in fat tissue.¹

If testing confirms high levels of progesterone, the usual clinical approach is to (a) lower or stop the dose and (b) working to release and metabolize stored hormone from fat tissue. Detoxification support is essential and should contain antioxidants like NAC, glutathione, green tea, and alpha lipoic acid. It should also provide nutrients to support all phases of detoxification, including amino acids, B-vitamins, Vitamin C and plenty of protein and water. Increasing fiber has been shown to help reduce luteal phase progesterone concentrations as progesterone levels showed an inverse relation with dietary fiber intake after mixed-model analysis.² Ensuring patients have plenty of fiber supports progesterone clearance.

A patient with high levels of stored progesterone is likely to feel worse before they feel better, perhaps for as many as three to four months, but by gradually releasing stored levels of hormone combined with detoxification support, it is possible to reregulate receptor function and return the patient to a sustainable dose.

References

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