

### WARNING!

## The Hidden Dangers of Spinal / Epidural Steroid Injections

*If you receive steroid epidural spinal injections (ESI) from a pain doctor, you may be in danger of adrenal suppression, a condition that could take your life.*

Abstract: Anybody trauma may trigger one's chemical emergency stress responses. At the first sense of danger, our pituitary gland produces the hormone ACTH, which signals our two adrenal glands to produce the hormone cortisol. This hormone is the body's own corticosteroid, saving our lives during accidents, heart attacks, after surgery, when we have broken bones, and anything causing pain and/or trauma to the body.

Cortisol regulates our body's reaction to physical stress, so the adrenal glands are essential. You can't live without them. The hormone cortisol supports emergency processes in the body, including critical blood pressure and blood chemistries.

If we take extra medicinal steroids by injection or in pill form, we must be careful because after six weeks of sensing the increased steroids in the bloodstream, the two adrenals quit supplying their own cortisol thinking there is plenty around.

Spinal steroid injections are unpredictable as to their absorption into the body. This makes it impossible to determine the six-week cut-off when the adrenal glands can become suppressed and end up dangerously useless.

Repeated spinal steroid injections can shut down your cortisol immune response without you knowing it until it is too late.

### How can my spinal steroid injection be harmful?

Your spinal steroid injections are supposed to be good. They are supposed to help with your pain which they can do, but all drugs have side effects, and in this case, it is the dangerous side effect of suppressing your own adrenal glands when you need them most.

Suppose you have a long-term painful disease and receive spinal injections (Epidural Spinal Injections or ESI) and they contain corticosteroids (steroids). In that case, you may be in danger of the potentially fatal condition known as *adrenal failure* (Addison's Disease). It develops without your knowledge from taking too many steroid medications too often either pills or injections.

Therapeutic steroids (prednisone, Medrol, Decadron, etc.) taken by mouth for longer than six weeks will cause your adrenal glands to stop producing their own steroid, *cortisol* that you will need at critical times. The adrenals are fooled by the pharmaceutical steroids into thinking the adrenals don't need to make their own steroid (cortisol) anymore. This is not good.

The result of taking any steroid drugs longer than six weeks results in your body losing life-saving protection when dealing with any physical stress: heart attack, broken leg, kidney stone, sickle crisis, a flare in your rare painful disease, or even after surgery.

Your adrenal glands sit on top of each kidney but have nothing to do with kidney function. The adrenals are endocrine glands and do two things when stress arrives: they first respond by producing adrenaline to shore up blood pressure. Then, cortisol is pumped out at emergency levels. Cortisol keeps you alive during physical stress, preventing the collapse of your blood pressure, shock, coma, and death if not treated quickly in what is called an *Addisonian crisis*.

Once asleep at the switch, the adrenal glands tend to stay suppressed, sometimes for months. You are now in potential danger - a time bomb just waiting to go off, without warning symptoms.

After the injected steroid is wholly absorbed (it does not matter where it is injected; it could be shoulder, hip, or spine), if it exerts its effects *longer than six weeks*, you are now left with your protective shields down and little or no cortisol to save your life. The problem is knowing when the critical six-week period is up with the erratic absorption of the injected steroid medicines.

Critical adrenal suppression can occur with one injection if it lasts longer than six weeks in your tissues. It is more likely to occur with the second or third injections without significant intervals in between.

**Case history:** *A National Pain Council member's son had a history of multiple spinal steroid injections. He nearly died after a broken leg when his blood pressure "mysteriously" crashed in the emergency room. Fortunately, the alert emergency room doctor took his history and realized he had had multiple spinal injections. The doctors started intravenous cortisol and saved his life.*

## How do you know if your adrenal glands are suppressed?

The only way to know what shape your first responder adrenal glands are in is with blood tests, usually with an 8 a.m. and 4 p.m. serum cortisol level and perhaps an ACTH stimulation test. The physician providing the injections should know the absorption rates of the steroids used in the spinal injections so they can monitor your adrenal status.

Awareness of potential adrenal insufficiency and notifying medical personnel of your history of multiple steroid injections is critical. Carrying a card in your wallet or ordering a Medic-Alert bracelet saying “possible adrenal insufficiency” would be a good idea.

The National Pain Council is recommending patients who have had more than one spinal steroid injection, without intervals of at least 2-3 months in between the injections, have the doctors performing the spinal injections certify that their adrenal glands are still working correctly. Doctors are trained to do this as part of prescribing any prolonged steroids, particularly with injectable steroids.

Adrenal cortisol tests should be routine in any pain management practice that does spinal steroid injections. Monitoring should be performed to watch for steroid-induced risk factors. Since there is no warning of adrenal suppression it is important not to be hesitant to do the tests.

People need to be in charge of their own health. Seeing your PCP might be a good idea to assist with protecting you from the complications of too many spinal steroid injections. If you have had multiple spinal steroid injections, *insist* on an adrenal evaluation. It's your life. You must be in charge of your own health.

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General questions, suggestions, and observations are welcomed. [nationalpaincouncil@gmail.com](mailto:nationalpaincouncil@gmail.com)  
Further reading for this report.

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6526135/>
2. Case History: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6388878/>