



**ORIGINAL RESEARCH PAPER**

**Psychiatry**

**STEROID INDUCED DEPRESSIVE DISORDER- A CASE REPORT**

**KEY WORDS:**

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The objective of this case report is to summarise published data concerning corticosteroid-induced adverse psychiatric effects. A clinical perspective will be adopted since opportunities to minimise the impact of corticosteroid-induced adverse effects tend to present themselves most readily within the sphere of clinical management.

Some of the psychiatric adverse effects of corticosteroids are mild, and not necessarily clinically significant. However, several serious psychiatric syndromes can be caused by corticosteroids: substance-induced mood disorders (with depressive, manic and mixed features), substance-induced psychotic disorders and delirium. While certain clinical groups may be at greater risk of corticosteroid-induced adverse psychiatric effects, corticosteroid-induced psychiatric toxicity is remarkably unpredictable.

The literature regarding prevention and treatment of corticosteroid-induced adverse psychiatric effects is poorly developed. As a result, the emphasis of this review is on clinical and epidemiological evidence linking specific adverse effects to corticosteroid medications. However, clinical reports do provide some practical guidance for prevention and treatment, and these are summarised as well. A variety of pharmacological strategies for treatment and prevention have been proposed. Education and support also appear to be important, and perhaps neglected, aspects of management.

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings, and sense of well-being. A depressed mood is a normal temporary reaction to life events such as loss of a loved one. It is also a symptom of some physical diseases and a side effect of some drugs and medical treatments. Depressed mood is also a symptom of some mood disorders such as major depressive disorder or dysthymia.

A prolonged depressed mood, especially in combination with other symptoms, may lead to a diagnosis of a psychiatric or medical condition which may benefit from treatment.

Here is a case report of 40 year old female who developed major depressive disorder due to steroid drug abuse.

**Case report:**

40 year old married female of rural Christian tamil speaking background was referred to psychiatric OP from ophthalmology where she was diagnosed as having steroid induced cataract and was suggested phacoemulsification. She was suggested psychiatric opinion because she was found to be consuming T. Dexamethasone over the counter for 13 years.

On probing into the history patient was curious to start steroid tablet as suggested by few of her co villager women who said this particular tablet relieved them from body pains. Since patient was feeling lethargic and thin built she was persuaded to start the drug which was started as T. Dexamethasone 2mg 2 tablets per day orally. Within 2 weeks of starting the drug she felt healthy, improved energy, better appetite and weight gain and whenever she tried stopping the drug she developed headache. So she was compelled to take the substance.

She had been continuing the drug without prescription for 13 years. She developed blurring of vision, bleeding gums, throat irritation for which she came to our hospital for ophthalmic consultation. She was also abusing analgesics like anacin to overcome withdrawal headache.

On careful history taking she revealed that she had symptoms of sad mood, crying spells, lack of interest, fatiguability and diurnal variation of mood which was also contributed by alcoholism in her husband. Symptoms worsened as she was continuing to use steroids and also developed acute anal fissure, loose stools and chronic gingivitis.

She was admitted in psychiatry ward and was taken Medicine opinion, medical gastroenterology, dental and ophthalmic opinion. She was started on a longer acting corticosteroid T. Prednisolone 5mg 1-0-1/2 and Dexamethasone was withdrawn. Treated also for drug induced gastritis and vomiting. Scaling was done by dentist for her tooth erosion along with antiseptic mouthwash for bleeding gums. Sitz bath and appropriate medications for her anal fissure was done. Liver protective medications were also added.

She was started on T. Sertraline 50 mg OD, and T. Lorazepam 2mg HS was given. After 2 weeks of stay in the hospital during which she also received psychotherapy for her marital conflicts she felt better with around 80 % improvement in her symptoms. She lost weight appeared, cheerful and hopeful of regular follow up and quitting her drug abuse. She followed up for next 6 months during which prednisolone was slowly withdrawn but antidepressant continued.

**Discussion:**

Hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis has been reliably observed in patients with major depression. One of the primary features of this HPA axis hyperactivity is reduced sensitivity to the inhibitory effects of the glucocorticoid dexamethasone on the production of adrenocorticotropic hormone and cortisol during the dexamethasone suppression test and, more recently, the dexamethasone-corticotropin-releasing hormone test. The data support the hypothesis that the function of the Glucocorticoid receptor is reduced in major depression in the absence of clear evidence of decreased Glucocorticoid Receptor expression. (Carmin M. Pariante 2000)

This case report is typical presentation, multisystem involvement and multidisciplinary approach to treat drug induced complications.

Corticosteroids are widely used to relieve signs and symptoms arising from many diseases, including common inflammatory and autoimmune disorders affecting a number of organ systems. However, corticosteroids also induce significant adverse effects; in particular, a range of severe psychiatric adverse effects may occur including delirium, depression, mania, psychosis and cognitive/memory impairment. These adverse effects occur in up to 60% of patients taking corticosteroids and recent studies show an increased rate of psychopathologies in this population. Long-term adverse effects on mood and behavior are severely debilitating, thereby influencing the quality of life, employment and health status of individuals taking corticosteroids. Strategies used to manage corticosteroid-induced psychiatric disturbances through psychotropic drugs vary significantly. This commentary summarizes existing literature on mechanisms underlying corticosteroid-induced psychiatric adverse effects and evidence associated with using psychotropic drugs to manage these effects. (Kusljic et al 2016)

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