Corticosteroids & Psychiatric Symptoms

*Mania and depression are the most common mood-induced side effects of oral corticosteroids.*

“Corticosteroid psychosis” is a known behavioural disturbance caused by corticosteroid administration. Although mania and depression are the most common manifestations of corticosteroid-induced psychiatric disorders, anxiety, psychosis and delirium or mixed depression and manic episodes may also occur. The behavioural effects are usually evident within 3 to 11 days of initiating therapy but may occur much later.

Higher doses of corticosteroids appear to increase the risk of developing psychiatric side effects. “Psychiatric side effects occurred in 1.3% of patients taking less than 40 mg of prednisone, in 4.6% of patients taking 41 to 80 mg and in 18.4% in those taking more than 80 mg”. There is a greater likelihood of developing psychiatric corticosteroid-induced effects if behavioural side effects occurred during a prior course of corticosteroid therapy. A higher incidence of corticosteroid-induced psychiatric effects occurs in females but this may not be related to a gender-specific vulnerability. Women tend to have an “increased frequency of illnesses requiring corticosteroids” (e.g. systemic lupus erythematosus and rheumatoid arthritis) which may account for an apparent higher risk. Prior psychiatric illness may or may not result in a higher incidence of behavioural side effects.

Stopping the corticosteroid, if possible, usually resolves the behavioural disorder within a few days to a few weeks. If symptoms resolve rapidly no further treatment is required. Where it is not possible to stop the corticosteroid or symptoms continue, treatment should be initiated as soon as possible. Depression may be treated with fluoxetine, electroconvulsive therapy, lamotrigine or lithium. Tricyclics may worsen psychiatric effects and should be avoided. Mania may respond to quetiapine, carbamazepine, haloperidol, lithium or olanzapine. Haloperidol has been used for psychosis and delirium whereas psychosis without delirium may be treated with risperidone. Where patients are known to develop manic symptoms with corticosteroids, carbamazepine and gabapentin may be given as preventative agents. (Geriatrics, Vol 63, #1, Jan 08)

Genetic Screening May Become Routine Part of Prescribing Drugs in the Future

*For the first time the FDA has recommended genetic screening in the Asian population before starting carbamazepine therapy.*

Approximately 5% of patients taking carbamazepine (Tegretol) who carry the gene called HLA-B*1502 will develop Stevens-Johnson syndrome or toxic necrolysis. In the U.S., the FDA has mandated a bold-boxed warning on the product labelling and recommends genetic screening of at-risk populations. The HLA-B*1502 gene which “correlates with severe skin reactions with carbamazepine is seen almost exclusively in Asians”. Some families may also carry the gene.

HLA’s are “proteins on white blood cells (i.e. leukocyte antigens) that play a big role in recognizing foreign invaders. Certain HLA subtypes will see a drug as harmful and mount an immune response that manifests as a hypersensitivity reaction”. Identifying patients at risk of developing a hypersensitivity reaction to a particular drug is a growing area of research. HLA subtypes are being investigated for other commonly prescribed drugs such as allopurinol, HIV drugs and sulfonamides.

Presently HLA testing is expensive and lengthy (taking days); however, in time, this type of testing will become more routine and will provide the clinician with a valuable tool to safer prescribing.

Cyclobenzaprine (Flexeril) / Duloxetine (Cymbalta) Interaction … Serotonin toxicity may occur when cyclobenzaprine is taken with duloxetine. A case report describes a 53 year old male taking duloxetine 60 mg daily who developed symptoms of confusion, sweating, agitation, tremors and myoclonus after starting cyclobenzaprine 10 mg 3 times daily. Other related drugs which inhibit serotonin reuptake (e.g. citalopram, clomipramine, escitalopram, fluoxetine, fluvoxamine, imipramine, paroxetine, venlafaxine, etc.) may result in additive serotoninergic effects.

It is recommended that the combination be avoided if possible. If the drugs are taken concomitantly, the patient should be monitored for symptoms of serotonin toxicity. (Hansten’s Drug Interactions & Management, April 2008)
Avamys Nasal Spray fluticasone furoate (GlaxoSmithKline) (not currently a benefit of ODB)
Avamys is a new unscented, alcohol-free steroid nasal spray indicated for the treatment of seasonal allergic rhinitis and its associated symptoms in patients 12 years of age and older. The Avamys spray device releases a fine mist which may result in less drip down the throat than with other products. Its adverse effects are similar to other nasal steroids. The onset of action of Avamys may occur as early as 8 hours after initial administration, however maximum benefit is generally observed after several days.
Dose & Administration: Prior to the initial administration the pump should be primed with 6 actuations. Re-priming is necessary (to insure accurate dosing) if the product has not been used for 30 days or more or if the cap has been left off for more than 5 days. The recommended dose is 2 sprays in each nostril once daily (at any time of day). Avamys should be shaken before use.
Availability & Storage: The product “is supplied in an amber glass bottle which is encased in a nasal device with a small, short nozzle and side-actuated mist-release button”. The liquid in the bottle is visible through a window in the device. Each spray delivers 27.5 mcg of fluticasone furoate and a total of 120 metered sprays. Avamys should be stored at room temperature.

Exelon Patch 5 & Exelon Patch 10 rivastigmine (Novartis) (not currently a benefit of ODB)
The Exelon patch, indicated for the treatment of mild to moderate dementia in Alzheimer’s disease, provides an option for patients with swallowing difficulties. There is generally less nausea and vomiting with the patch than with the capsules.
Dose & Administration: The initial dose of the Exelon patch is one 5 cm² patch applied once daily to a clean, dry, hairless area of the skin on the upper or lower back, upper arm or on the chest. If after at least 4 weeks, it is well-tolerated, the dose may be increased to one 10 cm² patch once daily. (When applying the patch it should be pressed firmly to the skin for about 10 seconds to ensure adhesion).
When switching from oral capsule to a patch the dosing is as follows: Apply a 5 cm² patch for patients taking <6mg daily of oral Exelon and a 10 cm² patch for patients taking 6 to 12 mg daily of oral Exelon. The patch should be started the day following the last oral dose.
Availability: The Exelon patch consists of 3 layers: backing film, drug product matrix and an adhesive layer. The Exelon Patch 5 contains 9 mg of rivastigmine and is 5 cm². The Exelon Patch 10 contains 18 mg of rivastigmine and is 10 cm².

Frova 2.5 mg tablets (frovatriptan succinate) Teva Neuroscience (not currently a benefit of ODB)
Frova is a triptan indicated in adults for the acute treatment of migraine headache with or without aura. The recommended dose is one tablet (2.5 mg) to treat a migraine attack. If relief is obtained from the first dose and the headache recurs, a second dose may be taken within 2 to 24 hours of the first dose. The total daily dose should not exceed 5 mg. The safety of treating more than 4 migraines in a 30 day period has not been established.

Do you know of patients, residents, or family members who have questions about their medication regime? Speak with your pharmacist about the “Meds Check Program”.

Cialis tablets (tadalafil) Eli Lilly ...New dosing Option
Cialis now offers a new dosing option: once-a-day dosing in addition to the previously approved on-demand dosing for the treatment of erectile dysfunction. When taken once-a-day, Cialis is effective over a 24 hour period between doses. The on-demand dosing results in effectiveness within 30 minutes and up to 36 hours. The new daily dose option is: 2.5 mg to 5 mg taken approximately the same time each day without regard to food. The 2.5 mg & 5 mg tablets are available in blister packs of 28 tablets.

Refer to product monographs for complete information

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