11 - SSRI antidepressants

SSRI antidepressants

© SPMM Course CPK elevation common; WBC also elevated These laboratory abnormalities are less frequent in serotonin syndrome SSRI antidepressants Nausea, vomiting, anorexia, and diarrhea are common side effects of SSRIs – these are somewhat dose-dependent and can be lessened by dose reduction or a slower titration. SSRIs (similar to TCAs, but less frequently) cause weight gain in up to 30% of patients especially in long-term maintenance phase. During initial treatment insomnia and anorexia are often present. Desensitization and down-regulation of receptors may explain the reversal of the initial SSRI appetitesuppressing effects, which can ultimately lead to weight gain late during therapy. Sexual difficulties such as reduced libido, impotence, ejaculatory dysfunction, and anorgasmia are reported with SSRIs. The incidence of sexual dysfunction is nearly every 1 in 3 patients treated. Akathisia like effects, EPSEs and galactorrhea are rarely reported with SSRIs. Also, fluoxetine is associated with a change in the duration of menstrual period – significance of this is unknown. SSRIs can cause functional impairment of platelet aggregation (thrombasthenia), but not a reduction in platelet number. This can cause easy bruising or prolonged bleeding in those with gastric ulcers or bleeding diathesis. SIADH is also reported; this is often troublesome in alcoholics and the elderly causing hyponatremia, hyperkalemia, hypo-osmolality in serum and increased osmolality of urine. Stopping the offending drug, using demeclocycline and fluid restriction can help. Severe sweating especially nocturnally is seen in some patients; Terazosin is effective in counteracting sweating. Nocturnal myoclonus is reported with SSRIs. The repetitive leg movements occur every 20 to 60 seconds, with extensions of the large toe and flexion of the ankle, the knee, and the hips. Benzodiazepines and levodopa may be tried. In restless leg syndrome, patients complain of creeping deep sensations that cause an irresistible urge to move the legs – disturbing sleep. It is associated with SSRIs and treatment is possible using ropinirole or benzodiazepines and levodopa. Duloxetine, venlafaxine, citalopram, fluoxetine and paroxetine can induce acute angleclosure glaucoma. The pathophysiological mechanism of SSRI –precipitated glaucoma remains unclear; anticholinergic effects or increased level of serotonin, which cause partial pupillary dilation have been implicated. SSRI discontinuation syndrome: The abrupt withdrawal of SSRI especially paroxetine (additional cholinergic rebound) or fluvoxamine (shorter half-life), is associated with a discontinuation syndrome. It usually requires at least 4-6 weeks of treatment before

© SPMM Course discontinuation and resolves spontaneously in 3 weeks. Those who have significant SSRI intolerance during treatment onset will have more discontinuation reactions. Fluoxetine is the SSRI least likely to cause withdrawal syndrome as its metabolite has a long half-life (more than 1 week), producing a slow self-tapering effect in plasma. Fluoxetine in some cases can be used to even treat discontinuation syndrome or to prevent it when stopping another SSRI

agent. But a delayed withdrawal syndrome has been reported with fluoxetine in some cases. SSRI discontinuation syndrome Criterion A Discontinuation or reduction of dose of SSRI after at least 1 month use Criterion B 2 or more of the following seen within 1-7days of criterion A causing significant functional impairment and not due to a general medical condition: x Dizziness, lightheadedness, shock-like sensations (paresthesias), diarrhea, fatigue, gait instability, headache, insomnia, nausea, tremors, visual disturbances Suicide risk and SSRIs: A link between antidepressant use and suicidal ideation among those up to age 24 in short-term (4 to 16 weeks), placebo-controlled trials of nine antidepressant drugs has been reported. The average risk of suicidal thinking or behavior during the first few months of treatment in those receiving antidepressants was 4 percent while placebo produces a risk of 2 percent. Ecological studies indicate that since the introduction of large scale SSRI prescription for every 10% rise in prescription 3% decline in suicide rates has happened in certain countries. It is also noted that patients were significantly more likely to attempt/commit suicide in the month before they began drug therapy than in the 6 months after starting it. But the issue still remains controversial, and MHRA has advised against certain SSRI prescriptions in children and adolescents. SSRIs increase the risk of upper GI bleeding especially in the elderly and in those using NSAIDs. SSRIs inhibit the uptake of serotonin into platelets; serotonin is crucial for the haemostatic response of promoting platelet aggregation. Further, SSRIs also increase gastric acid secretion thus elevating the risk of gastric erosion, ulcer and bleeding. Alcohol intake and being positive for H.pylori will also increase the risk of GI bleeding when prescribing SSRIs. Antidepressants with low inhibition of serotonin reuptake (e.g. nortriptyline, doxepin, trazodone) are safer in this regard when compared to those with high inhibition of serotonin reuptake (e.g. clomipramine, paroxetine, sertraline, fluoxetine). Increased serotonergic neurotransmission can adversely affect sexual performance; this explains SSRI-induced sexual dysfunction. Some antidepressants (bupropion, mirtazapine, moclobemide, nefazodone and reboxetine) may be associated with a relatively lower incidence of sexual dysfunction. 5-HT2 antagonists, (e.g. cyproheptadine, mirtazapine), 5-HT1a

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