Serotonin Syndrome Factsheet:

By Dr. Thanawat Wongphan

- **Definition:** Characterized by mental status changes, neuromuscular hyperactivity (high reflex + clonus + tremor), and autonomic instability (hot temp. + tachycardia). Mainly mention about drug toxicity and most commonly the result of the interaction between serotonergic agents and monoamine oxidase inhibitors.

- **How to recognize it?:** High dose of SSRI or SSRI combination (MAOIs, TCA, Trazodone, Opioids, Amphetamin, Methylphenidate, Ectasy, cocaine, some supplements: St. John’s wort, ginseng) or SNRI combination

- **How to make a diagnosis?:**
  - By Clinical Diagnosis (w/u likes alteration of consciousness: blood glucose, CPK, CT etc.)
  - DDx: 1. NMS (distinguished points: 1. slow onset with Drugs (Hado, CPZ, Levedopa additions: Metoclopramide, lithium, reserpine, amoxapine, phenelzine etc.)ii 2. Typical- Bradycardia 3. extrapyramidal "lead pipe" rigidity)
  2. Malignant carcinoid syndrome (Hx: met. Gl tumor (90% is distal ilium and appendix) + Symptoms: hot flush, diarrhea, asthma, w/u: serotonin metabolite 5-HIAA in a 24-hour urine collection (normal value [NV] = 0-8.9 mg/d; plasma serotonin NV is 0.04–0.2 mg/mL)vi).

- **How to treat it?:** Admit, discontinuing drugs (or lavage + charcoal if acute ingest.), iv. (beware of rhabdo. (also need alkalinite) + renal fail.), cyproheptadine, BDZ (severe: use vecuronium NEVER use Succinylcholine). antipyetic.

- **Things to remember:** Drugs
  - MAOIs: (Lexapro, Zoloft, Effexor, Selegiline) + SSRIs: (Prozac, Praxil, Dapoxetine, Celexa)
  - Linezolid (reversible non-selective MAOIs) + any SSRI, SNRI.

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iv Lawrence S. Friedman, Larry A. Weinrauch, and John A. D'Elia Metoclopramide-Induced Neuroleptic Malignant Syndrome Arch Intern Med, August 1987; 147: 1495 - 1497.

v Luigi Santacroce Malignant Carcinoid Syndrome http://emedicine.medscape.com/article/282515

Worth to find out: Libby Zion.