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Serotonin Discontinuation Syndrome: Information for Physicians



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Case

- Dave is a 25-yo male who presents on a Monday to the walk-in with a severe migraine.
- Symptoms of general malaise, flu-like symptoms and “electric shock” sensations.
- Medications: Has been taking Venlafaxine XR 300 mg daily for months for anxiety
- Unfortunately, he has not taken any since Friday because 1) he ran out of medications on Friday, and 2) went camping over the weekend…

What is Serotonin Discontinuation Syndrome?

Constellation of symptoms (such general malaise, flu-like symptoms, sensory disturbances) which can occur after a serotonin antidepressant is abruptly stopped.

Key features

- Onset usually within days of abrupt discontinuation of an SSRI, or SNRI, or missing a dose or various doses (such as “drug holidays”), or even reducing a dosage
- Symptom severity usually mild and self-limiting (usually 7-14 days) but may be distressing
- Symptoms resolve when the serotonin medication is (re)started

Symptoms of Serotonin Discontinuation Syndrome

- Physical
  - Headaches
  - Flu-like (eg. fatigue, lethargy, myalgia)
  - Disequilibrium (eg. dizzy, vertigo, ataxia)
  - GI (nausea, vomiting)
  - Sensory disturbance (eg. paresthesia, sensations of electric shock)
  - Sleep disturbance (eg. insomnia, vivid dreams)
- Psychological
  - Anxiety, agitation, crying spells, irritability

Mnemonics for Symptoms of Serotonin Discontinuation Syndrome

"FINISH" Mnemonic for Antidepressant Discontinuation Syndrome

- F)lu-like symptoms -- fatigue, lethargy, general malaise, muscle aches/headaches, diarrhea
- I)nsomnia
- N)ausea
- I)mbalance: Gait instability, dizziness/lightheadedness, vertigo
- S)ensory disturbances: Paresthesia, "Electric shock" sensations, visual disturbance
- H)yperarousal: Anxiety, agitation

"GRIEF" Mnemonic (Schatzberg et al, 1997)

- G)astro-intestinal – nausea, vomiting
- R)eally bad dizziness – dizziness, ataxia
- I)nsomnia – insomnia, vivid dreams
- E)lectric shock – shocks, paresthesias
- F)lu-like symptoms – fever, chills, fatigue, myalgia

It is important to recognize SSRI discontinuation syndrome because:

- Although usually mild and not dangerous, symptoms can still be distressing for patients
- Symptoms may discourage patients from using medications in the future, out of concerns such as becoming 'addicted' or 'dependent' on medication

How common is it?

- Occurs in 20% of patients after abrupt discontinuation of antidepressants taken for at least 6-8 weeks (Warner, 2006).
- Occurs rarely if patients have had antidepressants for less than 6-8 weeks.

Risk factors

- Factors which increase risk are:
    - Short half-life SSRIs such as paroxetine, fluvoxamine, sertraline, or SNRIs such as venlafaxine
- Longer duration of treatment, such as at least 6-8 weeks

Differential Diagnosis

Symptoms of SSRI discontinuation can be seen in other conditions as well:

- **SSRI discontinuation**: Onset of symptoms usually within few days (e.g. 1-3 days) within stopping a medication.
- **Bipolar manic episodes:** Onset of irritability, insomnia, increased mood / agitation or self-esteem
- **Relapse of depression**: Usually occurs after 2-3 weeks
- **Medication side effects**: In situations where a patient is being switched from an older medication (such as SSRI) to a newer medication without the same serotonin activity, the onset of symptoms may appear to be side effects of a new medication, when in actuality, it is serotonin discontinuation syndrome

Prevention

- **Minimize use of SSRIs**: Start with non-medication strategies prior to considering SSRIs for conditions such as depression and anxiety.

- If SSRI is used:
  - **Use longer half-life SSRI**, e.g. fluoxetine
  - **Avoid using medications with short half-life**, e.g. paroxetine (Paroxetine) (SSRI), or venlafaxine (Effexor) (SNRI).
  - **Taper dose slowly**, e.g. reducing dosages by 25% over 1-2 weeks). For patients who are sensitive to dose reductions, contact a pharmacy that can provide a special compounded prescription to make it easier to slowly reduce a medication.
- Patient education
  - Educate patients about not stopping their SSRI suddenly, without the support of their physician.
  - Reassure patients that even if they develop SSRIs, the symptoms are distressing, they are time limited.

Management

- Increase SSRI dose if acute symptoms appear during tapering.
- If there are severe symptoms that persist, then consider switching to an SSRI with a long half-life, such as fluoxetine (Prozac).

Case, Part 2

- Dave is a 25-yo male who presents on a Monday to the walk-in with symptoms of serotonin discontinuation syndrome.
- He is given a prescription so that he can restart his Venlafaxine XR, and told to return if symptoms do not improve.
- He has rapid improvement of his symptoms and vows never to stop his medications without checking with his physician.

References

- Canadian Adverse Drug Reaction Newsletter, Vol 8(4), Oct 1998, www.hc-sc.gc.ca/hpb-dgps/therapeut
- Warner C et al: Antidepressant Discontinuation Syndrome, Am Fam Physician 2006 Aug 1; 74(3): 449-456.

Recommended Websites

- If you are switching medications, or wanting to stop a medication, consider this resource http://wiki.psychiatrienet.nl/index.php/SwitchAntidepressants

About this Document

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