

# 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

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- 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

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- 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

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

## Recommended Websites

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

## About this Document

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## Conflicts of Interest

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