Recognizing Opioid Withdrawal Syndrome (OWS)

Withdrawal is an often ***overlooked*** medical challenge in the opioid epidemic, which has reached dangerous, epic levels. In 2016, opioids killed more people (64,070) than car crashes (about 37,400), guns (about 38,000) or breast cancer (about 40,000).[1]

What is Opioid Withdrawal Syndrome (OWS)?

- **Opioid Withdrawal Syndrome (OWS) is a constellation of signs and symptoms resulting from norepinephrine surge in the brain.**
- OWS doesn't discriminate and symptoms can occur in any person attempting to stop using opioids.
- **The physical consequences of withdrawal have been described as the cruelest virus.** Symptoms include chills, aches and pains, muscle tension and twitching, stomach cramps, nausea and vomiting, runny nose, yawning, heart palpitations and insomnia.
- Withdrawal symptoms can drag on for up to a week, sometimes even longer.

Consequences of Poorly Managed OWS

- From a clinical standpoint, **opioid withdrawal is one of the most powerful factors driving opioid dependence and addictive behaviors.[2]**
  - Opioid use for as little as several days can create physical dependence, which means that the body relies on opioids to prevent withdrawal. Continued use may lead to addiction, which is characterized by more long-lasting changes in the brain and intense drug craving.[2]
- When opioid withdrawal symptoms are **misunderstood or under-treated**, it can lead to continued drug use beyond a clinical need or benefit.[2]
- In a survey of patients with chronic pain, **56.5% of patients reported avoidance of withdrawal as the primary reason for continued use of prescription opioids.[3]**
- **Fear of OWS and/or ineffective and partial withdrawal management deters people from seeking care and can lead to abandonment of treatment.[2]**

OWS Management as Part of the Solution

- **OWS management is central to successful opioid discontinuation and moving toward recovery.**
- Managing withdrawal symptoms can reduce physical and psychological barriers that prevent opioid discontinuation and can keep people engaged and retained in a treatment experience.

The Brain on Opioids[2]

Withdrawal is a complex neurobiological process.

1. Opioids suppress norepinephrine in the part of the brain that regulates **"fight or flight"** feelings and reactions.
2. As a result, the brain produces more norepinephrine to maintain normal operations.
3. **A sudden reduction or removal of opioids leaves the increased norepinephrine unchecked and produces symptoms of withdrawal that can be severe.**

References

1. Ahmad FB, Bastian B. Quarterly provisional estimates for selected indicators of mortality, 2016-Quarter 2, 2017. National Vital Statistics System, Vital Statistics Rapid Release Program. 2017. National Center for Health Statistics.
2. Kosten TR, George TP. The Neurobiology of Opioid Dependence: Implications for Treatment. *Science & Practice Perspectives*. 2002;1(1):13-20.
3. Weiss RD. *J Subst Abuse Treat*. 2014 August; 47(2): 140–145. doi:10.1016/j.jsat.2014.03.004.

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