Clinical Opioid Withdrawal Scale

Description and Use Cases

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History of opioid withdrawal[1]

- First withdrawal scales developed in the 1930's
- "One of the most stereotyped syndromes in clinical medicine" – Isbell, 1950
- 1960's – Opiate Withdrawal Experience Scale
- 1988 – Clinical Institute Narcotic Assessment (CINA) – Peachey and Lei
- 1999 – Clinical Opioid Withdrawal Scale (COWS) – Wesson et al

COWS

- Validated scale used to monitor and describe the severity of opioid withdrawal
- Emerged around the time that buprenorphine became available for the treatment of opioid use disorder
- 11 items assessed on the scale
- Relatively objectivistic
- Open source(!!)

Example of COWS instrument

- Note that multiple items are very objectivistic
  - Yawning
  - Heart rates
  - Tearing
  - Sweat that is observed
  - Pupillary dilation
- Training for the 11 items is not extensive but training is definitely needed in order to adequately equip all front-line staff

COWS Scoring

- Interpreting the score:
  - < 5 = no clear evidence of opioid withdrawal
  - 5-12 = mild opioid withdrawal
  - 13-24 = moderate opioid withdrawal
  - 25-36 = moderately severe opioid withdrawal
  - > 36 = severe opioid withdrawal
- At a score of 12 or higher, the risk of having a precipitated withdrawal with use of buprenorphine is reduced[2]

Practical Use Cases for COWS

- Assessment to diagnose if a patient is in opioid withdrawal
- Assessment to time inductions for buprenorphine induction (12 or higher)[2]
- Assessment of effectiveness of treatment for opioid withdrawal with clonidine, buprenorphine or methadone
- Objective clinical data for outcomes reporting
- Objective clinical data for research reporting

Pitfall and Warnings

- If you launch an initiative to use COWS . . .
  - What will you do with the information?
  - Do you have clinical pathways of care developed?
    - Inpatient care pathways – standardized order sets, formulary . . .
    - Outpatient care pathways – referral pathways, bridge clinics . . .

Pitfalls and Warnings . . .

- Do you have staff that are properly trained to manage addiction and withdrawal symptoms?
  - Nurses
  - Advanced Practice Providers
  - Physicians
  - Masters Level Therapists
- Do you have enough buprenorphine waivered clinicians to manage the case load?

Admonitions

- We have to more forward in the care of patients with opioid use disorders and other addiction disorders
- Opioid withdrawal can be managed well with standardized tools and standardized medication regimens

Admonitions

- Quality education can be obtained from the American Society of Addiction Medicine (ASAM)
  - Treatment of Opioid Use Disorder Course (8 CME)
  - Fundamentals of Addiction Medicine Course (40 CME)
- Incremental changes with a solid roadmap can transform institutions

References

- 1: Tompkins DA, Bigelow GE, Harrison JA, Johnson RE, Fudala PJ, Strain EC. Concurrent validation of the Clinical Opiate Withdrawal Scale (COWS) and single-item indices against the Clinical Institute Narcotic Assessment (CINA) opioid withdrawal instrument. Drug Alcohol Depend. 2009 Nov 1;105(1-2):154-9. doi: 10.1016/j.drugalcdep.2009.07.001. Epub 2009 Aug 3. PubMed PMID: 19647958; PubMed Central PMCID: PMC2774236.
- 2: Nielsen S, Hillhouse M, Weiss RD, Mooney L, Sharpe Potter J, Lee J, Gourevitch MN, Ling W. The relationship between primary prescription opioid and buprenorphine-naloxone induction outcomes in a prescription opioid dependent sample. Am J Addict. 2014 Jul-Aug;23(4):343-8. doi: 10.1111/j.1521-0391.2013.12105.x. Epub 2013 Sep 24. PubMed PMID: 24112096; PubMed Central PMCID: PMC4151625.

Questions??