

When prescribing opioids, what steps do you take to test for amphetamine and methamphetamine?

Jane and Yvonne both have chronic pain, and, in your opinion, both are candidates for prescription opioids. You take the guidelines from the Centers for Disease Control and Prevention¹ seriously, so you order baseline urine drug testing for both patients before prescribing. Results from the presumptive screening tests you ordered come back, and both patients are positive for the drug class amphetamine.

You know that some prescription drugs contain amphetamine, and some over-the-counter decongestants even contain methamphetamine. Are both Jane and Yvonne taking illicit drugs? Is either of them? What tests will give you the answers you need?



Case history

Prescribed amphetamines, illicit methamphetamine

Jane's presumptive screen came back positive for the drug class amphetamine. This was consistent with her prescription for Adderall®, which she takes for ADHD. A follow-up definitive test was positive for amphetamine, but also for methamphetamine, which is not consistent with an Adderall prescription.

A d/l isomer test then showed the proportion of the d form was 98%, indicating Jane has likely been using illicit methamphetamine. Methamphetamine is often present in a ratio of two isomeric forms, d-methamphetamine and l-methamphetamine.

In this case, it is not possible to determine from the test results alone whether Jane has actually been taking Adderall as well, since metabolism of either d- and l-methamphetamine will yield amphetamine.

Next steps

In Yvonne's case, it is valuable to discuss with her that her test results were consistent with her reported use. If her clinical picture makes prescription opioids a good therapeutic option, a prescription may be warranted, in line with CDC guidelines.

In Jane's case, the likelihood that she has been using illicit methamphetamine is cause for concern. In addition, further investigation, such as pill counting, may be warranted to determine if she is also taking the prescribed Adderall. While a prescription opioid may still be warranted for her pain, it should only be considered after patient counseling about the risks of illicit drug use, and developing a program of urine testing and other measures to ensure compliance with the treatment plan.

Case history

Over-the-counter methamphetamine

Yvonne's screen came back positive for the drug class amphetamine. She was not receiving any prescription medications containing amphetamine. A follow-up definitive test was positive for amphetamine, and also for methamphetamine. A d/l isomer test then showed a proportion of the d form of less than 1%, consistent with Yvonne's report that she was using a nasal decongestant containing l-methamphetamine. The presence of amphetamine in the sample was also consistent with this report, since l-methamphetamine is metabolized to amphetamine.

Learn more at [QuestDrugMonitoring.com](https://www.questdiagnostics.com/questdrugmonitoring)

Reference

1. CDC Guideline for Prescribing Opioids for Chronic Pain. <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>

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