Urine Drug Testing in Chronic Opioid Therapy — Clinical Considerations

Why do urine drug testing in chronic opioid therapy?

Reason 1:
To open up a dialogue with the patient about your sincere efforts at reducing risk

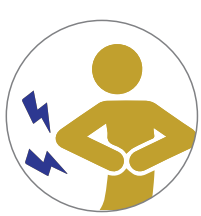
Reason 2:
To assist in monitoring whether or not the patient is taking the prescribed medication

Reason 3:
To obtain objective information on whether or not the patient is using any nonprescribed opioids or high-risk medications (e.g., benzodiazepines), or any illicit drugs

Reason 4:
To comply with current monitoring recommendations for patients on chronic opioid therapy

Who should be tested?

Everyone who is being considered for or being prescribed chronic opioid therapy



What should you test for?*

- The medication that you are prescribing
- Medications commonly prescribed or misused in your patient population
- Commonly used illicit drugs

These are often combined in testing panels, but clinicians should work with their laboratory to discuss potential additional testing options.

How often should you test urine in patients prescribed chronic opioid therapy?

- **At baseline:**
  - Before initiating chronic opioid therapy
  - Before continuing chronic opioid therapy in patients who are establishing care with a new provider
  - Before continuing chronic opioid therapy in patients who have not had a prior test

- **After initiation of chronic opioid therapy (first 4–6 months):**
  - Every 1–3 months for patients who are new to opioids
  - Every 1–3 months for patients who are new to you

- **In patients who have been stable on opioids, adjust monitoring depending on risk:**
  - Low risk: ≥1 times/year
  - Moderate risk: ≥2 times/year
  - High risk (typically comanaged by pain specialist): ≥3 times/year

- **Anytime the clinician feels it is necessary**
  (e.g., when a patient exhibits worrisome behavior related to the prescribed medication)

Random drug testing, where the patient is contacted at a random time and asked to provide a urine sample, is more sensitive than scheduled drug testing but is difficult to implement in practice and may be overly burdensome for some lower-risk patients. Instead, urine drug testing is more commonly performed at a scheduled appointment; this is still useful because patients with substance use disorder are commonly not able to control their drug use to avoid unexpected results.

How should you obtain the urine?

- Discuss the urine collection process openly with patients, as is done with all other clinical testing. The purpose of testing should not be misrepresented — the test is for reassessing the risks of prescribing a controlled substance.
- Document the time of last medication use before urine collection.
- Although observed urine collection may help prevent urine adulteration, it is an invasion of a patient's privacy and is not recommended nor necessary.

How should you handle unexpected results?

- Assess the most likely cause of the unexpected result and adjust the treatment plan accordingly using a patient-centered approach.
- Confirm that unexpected results are not caused by preanalytical errors (e.g., mislabeling) or analytical issues.*
- If unexpected results are contested by the patient, they should be analyzed using definitive testing methods.*
- If unexpected findings are confirmed by patient testimony or definitive testing, the clinician should discuss their concerns with the patient in an **open, nonjudgmental, and honest** manner without making any accusations. The clinician should compassionately act on the information they have, and if there are concerning findings on urine drug testing, the patient will need to be monitored more closely (e.g., more frequent office visits, pharmacy pickups).

Four possible scenarios — and how to respond:

1 Urine drug test returns positive for the patient's prescribed medications and no other drugs (prescription or illicit).

- **Typically no need to confirm with more testing —** in rare cases, if there is apparent clinical instability, then more-specific metabolite identification may be useful, and the urine drug test result should not negate the clinical concern.

- **Possible concerns:**
  Even if results return as expected, they may not actually represent adherence to medications. For example, positive results by immunoassay, particularly those targeting a class of drugs (e.g., opiates), may be falsely reassuring, as such results do not confirm that the patient is taking all the prescribed drug versus only some of it versus another drug in the same class. Thus, if the level of concern is high, consider obtaining additional testing.

- **What to say to the patient:**
  Assuming there are no reasons to have concerns about the results, you can simply state: "Your urine result is consistent with the medication that I am prescribing." *You may also add,* "Having said that, urine drug testing has limitations, so I hope you will let me know if you are having problems so that I can help sooner rather than later."

2 Urine test returns negative for the patient's prescribed medications.

- **Obtain definitive testing** if the results are contested by the patient.

- **Possible causes:**
  The urine sample may have been adulterated (e.g., diluted, substituted with another person's sample), a drug may be present but at a level below the cutoff for positive, or the result may be a false negative.

- **What to say to the patient:**
  "I need some help interpreting the urine drug test result. Your urine test did not have the medication in it that I am prescribing. Please tell me about it."

3 Urine drug test returns positive for substances that the patient is not supposed to be taking (prescription or illicit).

- **Discuss findings with the laboratory** to ensure that the findings are truly unexpected and not a false positive or an expected me tabolite. If the laboratory says that the findings cannot be explained by prescriptions and the patient contests the results, then obtain definitive testing.

- **Possible causes:**
  The patient may be taking illicit drugs or the result may be a false positive (e.g., due to cross-reactivity with another medication).

- **What to say to the patient:**
  "Your urine had an unexpected drug in it. Can you tell me about what you are taking/using? Can you tell me about your use of X?"

4 Urine is diluted.

Obtain a repeat, valid sample.

Possible causes:

If the urine is dilute *only* in times of clinical stress or relapse, then the patient may be trying to hide illicit drug use or misuse of prescribed drugs. Chronically dilute urine may be caused by rare urine-concentrating abnormalities such as diabetes insipidus and primary polydipsia.

What to say to the patient:

"We could not properly test your urine because it was too watered down. Can you tell me how this could have happened? We will need to send a new sample to be tested first thing in the morning after avoiding drinking overnight."

*Your laboratory can help with any questions on the performance and interpretation of urine drug testing. For more on this topic, see our learning resource "Urine Drug Testing — Common Laboratory Methodologies."

References:

1. Gourlay DL et al. Urine drug testing in clinical practice: the art and science of patient care, sixth edition. August 31, 2015.
2. Argoff CE et al. Rational urine drug monitoring in patients receiving opioids for chronic pain: consensus recommendations. Pain Med 2018 Jan 1; 19:97.
3. Jarvis M et al. Appropriate use of drug testing in clinical addiction medicine. J Addict Med 2017 May/Jun; 11:163.

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