

## Physician identification of opioid diversion: A difficult diagnosis

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Reflective of the movement toward more responsive management of chronic pain, the prescribing of opioid analgesics has increased exponentially in recent years.<sup>1</sup> In fact, one opioid—hydrocodone—has been the most frequently prescribed medication in the United States for the past several years.<sup>2</sup> Unfortunately, the nonmedical use of opioids has paralleled the increase in prescribing. With the abuse of prescription opioids at epidemic levels in some regions of the United States, and with evidence mounting that most nonmedical users of prescription opioids obtain their drugs through diversion from legitimate channels,<sup>3</sup> the onus is being placed on individual physicians to identify and prevent opioid diversion in their practices. In the state of Florida, recent opioid prescribing legislation now requires physicians to discharge all patients evidencing diversion, although the legislation does not specify what constitutes such evidence.<sup>4</sup> While identifying opioid diversion is an appealing and important goal, it may be problematic to implement. Indeed, the identification of purported opioid diversion by physicians is more likely to uncover physicians unskilled in urine drug testing practices and/or unable to identify patients with substance use disorders.

Several influential voices in the field of addiction medicine suggest that urine drug testing can be used to “manage” or “identify” prescription opioid diversion risk.<sup>5,6</sup> However, an important caveat is that urine drug testing alone is incapable of identifying opioid diversion and thus may place undue weight on the test. For example, a recent report described a patient whose urine drug test was (apparently) free of prescribed oxycodone.<sup>7</sup> This “negative” urine drug test result led the treating physician to accuse the patient of diversion, with dismissal from the headache practice. In fact, the testing laboratory had failed to identify the fact that oxycodone was indeed present in the urine specimen but at a concentration below their usual (and atypically high) reporting

threshold.<sup>7</sup> This case report highlights the fact that urine drug testing interpretation can be complex and test results can be misleading. Indeed, there is an extensive differential diagnosis for (apparently) substance-negative urine drug test results,<sup>8</sup> of which diversion is perhaps the most serious, but least likely, explanation. Therefore, a “negative” urine drug test result may indicate (1) true absence of drug or metabolite, (2) a screening immunoassay that is not designed to detect the drug or metabolite of interest, (3) limited specificity of a screening immunoassay, (4) presence of drug or metabolite below the reporting threshold, and (5) human or laboratory error.<sup>8</sup> Moreover, in cases where the drug or metabolite is absent, or present below the laboratory reporting threshold, it may be due to genetic (eg, cytochrome P450 polymorphisms), pharmacokinetic (eg, metabolizing enzyme induction), or behavioral (eg, lack of recent use due to pain abatement, abuse, addiction, pseudoaddiction) factors.

Aberrant opioid-related behaviors, discovered through clinical practice or through querying state prescription drug-monitoring databases, must be noted and addressed with the patient, but the significance of some behaviors may be ambiguous and highly contextual. Likewise, intervisit “call backs” for pill counts are helpful clinical tools, but “short counts” share the behavioral differential diagnosis described above. Abnormal drug test results, short pill counts, and other potentially aberrant opioid-related behaviors should prompt a dialog between physician and patient. Such conversations should attempt to discern the motivation behind potentially aberrant behaviors and may uncover poorly controlled pain, “chemical coping” with psychiatric problems, and substance use disorders, all of which can be addressed to improve clinical outcomes.

Incorrect accusations of opioid diversion are gravely serious, with potential implications that

include dismissal from pain clinics, deprivation of necessary medical treatment, negatively influencing future therapeutic relationships, loss of patient trust in physicians, false identification of diverters to third-party payers, and even involvement of law enforcement.<sup>9,10</sup> Inevitably, actions resulting from misinterpretation of drug test results will someday result in malpractice litigation against physicians. Thus, the consequences of false accusations require that the certainty of identification be high. Short of patient admission or reliable corroborating witness accounts, the most reliable indicator of prescription opioid diversion, may be successful adjudication against your patient in a court of law.

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