Pain Management

Strategies for screening and monitoring patients receiving chronic opioid therapy

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Opioids offer significant benefit to patients with pain when used as prescribed, but they cause immense harm when misused and abused (Gottlieb & Woodcock, 2017). Although cancer-related pain management often includes opioids, appropriate and safe prescribing must be at the forefront of practice for every prescriber (National Comprehensive Cancer Network [NCCN], 2017). Prescribers may lack confidence about how to safely prescribe opioids, detect abuse or addiction, and discuss these issues with their patients (Pearson, Moman, Moeschler, Eldrige, & Hooten, 2017). Prescribers most effectively practice when using clinical strategies to screen and monitor for aberrant behavior related to chronic opioid therapy (COT).

The clinical guidelines of several societies (Chou et al., 2009; Dowell, Haegerich, & Chou, 2016; Paice, 2016) provide recommendations to reduce the risk of aberrant behavior in patients who receive COT. However, no guidelines from professional organizations exist specifically for the assessment and management of opioid-use disorder for patients with cancer (Carmichael, Morgan, & Del Fabbro, 2016). The U.S. Food and Drug Administration (FDA, 2017) developed the Risk Evaluation and Mitigation Strategy (REMS) programs to detail provider responsibilities for select opioids used for chronic pain. The most recent NCCN (2017) guidelines specifically describe the application of REMS for patients with cancer. These guidelines outline strategies to identify patients’ potential for misuse and abuse of opioids. No one strategy is sufficient to detect aberrant behavior; therefore, multiple sources of data are a foundation for consideration (Carmichael et al., 2016). The purpose of this article is to discuss screening and monitoring strategies to implement when prescribing COT for patients with cancer-related pain (see Figure 1). The data collected from these strategies can guide prescribing practices. Interpretation and coordination of care plans are beyond the scope of this article.

Universal Precautions

Patients with cancer are as likely as the general population to have a preexisting problem with substance misuse (Barclay, Owens, & Blackhall, 2014). In addition, many may be cared for by family members with a history of drug abuse or addiction (Barclay et al., 2014). Every patient, regardless of whether he or she has cancer, is exposed to a degree of risk when treated with opioids for pain (Passik, 2009). A cancer diagnosis does not preclude the possibility of misuse, abuse, addiction, or diversion (Angelescu, Ehrentraut, & Faughnan, 2013). The currently accepted approach for screening and monitoring of patients undergoing COT is based on the principle of “universal precautions” (Paice et al., 2016). Application of universal precautions implies that interventions and diagnostic tools assess risk and monitor for aberrant behavior related to COT, regardless of having a cancer diagnosis (Passik, 2009).
Initial Risk Assessment

NCCN (2017) suggests an initial patient assessment of risk factors (see Figure 2) for aberrant use of opioids by using a detailed patient evaluation and screening tool. As an approach to screening, patients can be stratified into risk categories (low, moderate, and high) based on risk factors for abuse and misuse (FDA, 2017) and provided with additional safeguards to decrease possible aberrant behavior throughout the duration of receiving COT (Sehgal, Manchikanti, & Smith, 2012). Patients stratified at low risk may be safely monitored at least annually (Sehgal et al., 2012). Patients who are at moderate risk require adherence monitoring at least every six months and more frequent urine drug testing and may be cared for in collaboration with appropriate specialist support (Paice, 2016). For high-risk patients with one or more opioid misuse or abuse risk factors, adherence monitoring is frequent (weekly or monthly) and pain management is directed by addiction specialists (Paice et al., 2016).

As a component of patient education, prescribers explain the purpose of the risk assessment to patients and ensure that their risk status will not preclude them from appropriate care (Butler, Fernandez, Benoit, Budman, & Jamison, 2008; NCCN, 2017). A clinical interview and a highly sensitive screening instrument should be used to determine the amount of support and magnitude of safeguards necessary to proceed with COT (Angelescu et al., 2013). The REMS program (FDA, 2017) suggests that providers conduct a clinical interview to obtain patient-reported information related to previous and current mental health, sexual abuse, substance abuse, social functioning, and family history. NCCN (2017) recommends the Screener and Opioid Assessment for Patients With Pain-Revised (SOAP-R) (Butler et al., 2008) or the Opioid Risk Tool (Webster & Webster, 2005) for risk stratification to help predict which patients being considered for COT may exhibit aberrant medication behaviors in the future. On completion, prescribers should inform patients of their risk status determination and offer appropriate support to help mitigate the impact of known risk factors (Passik, 2009).

Monitor

After completion of an initial risk assessment, prescribers should routinely monitor for aberrant drug-taking behaviors or evidence of diversion (NCCN, 2017). Several strategies exist for opioid misuse and abuse monitoring to implement in combination with being familiar with red-flag behaviors that require additional inquiry. Some red-flag behaviors could suggest that the patient has inadequate analgesia or inadequate control of other troubling symptoms (e.g., anxiety, depression) or could suggest diversion of the prescriptions by others involved in the patient’s care (Angelescu et al., 2013). The prescriber can improve the safety of COT by seeking to understand the motivation behind the patient’s behavior while conducting monitoring strategies. Patients should be informed that the following strategies are part of a routine procedure for all patients and are important for maintaining the safety of their treatment.

Pain Medication Diary

A pain diary can be used to account for the dose taken and time, including notations for all scheduled and as-needed doses (Angelescu et al., 2013).

Pill Count

During outpatient visits, pill counts allow for inspection of prescription bottle and pills. Pill counts also serve as a verification of pain medication diary records (Angelescu et al., 2013). Providers, in collaboration with pharmacists, can ensure that the number and type of pills match clinical records. Limited to a 30-day medication supply, prescriptions can be appropriately gaged by refill requests.

Assessment Tool

In addition to conducting an initial screening for risk stratification, prescribers should implement an assessment tool to monitor aberrant behaviors throughout COT (NCCN, 2017). Two such validated instruments that examine concurrent misuse are the Current Opioid Misuse Measure (Butler, Budman, Fanciullo, & Jamison, 2010), a self-assessment that...
rates indicators of current opioid misuse for the previous 30 days, and the Addiction Behaviors Checklist (Wu et al., 2006), a tool for repeat use to assess the patient’s report and direct observations over time.

Urine Drug Test

A urine drug test (UDT) should be completed initially when beginning regimens and at least twice a year for all patients on COT management to identify the presence of illicit or nonprescribed substance and the presence or absence of prescribed medication (Owen, Burton, Schade, & Passik, 2012). Inappropriately negative UDT results raise concern for diversion or hoarding of opioids. Given the prohibitive costs of mass spectrometry for high levels of sensitivity and accuracy of UDT interpretation, clinicians must be aware of the potential for misinterpretation or inappropriately negative UDT results (Rauenzahn et al., 2017). Strategies for managing patients with abnormal UDT results may include shorter intervals between clinic visits, provision of only long-acting opioids, collaboration with a substance-abuse expert, and brief motivational interviewing (Rauenzhan et al., 2017).

Prescription Drug Monitoring Programs

Prescription drug monitoring programs collect prescription and dispensing data of controlled prescription drugs. Depending on individual state laws and program availability, prescribers should use the database to search a patient’s history of controlled substance prescription information (NCCN, 2017).

Patient, Family, and Caregiver Education

Prescribers should educate patients and caregivers about potential risks of misuse and abuse, and responsible use of opioids to increase their awareness and include them in their plan of care (NCCN, 2017).

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Patients also should be educated about the dangers of sharing their medications, particularly with family members or friends, and the importance of secure storage and disposal of opioids. Patients must be made aware that opioids need to be used with caution, locked in a secure location, not combined with alcohol or illicit substances, and taken only as prescribed and by the person for whom the medication is prescribed (NCCN, 2017). Patients, caregivers, and family should be encouraged to contact their prescriber if the pain management plan does not control their pain (NCCN, 2017).

Patient–Provider Agreement

A patient–provider agreement describes the expectations for the prescriber and patient and lists the risks and benefits, alternatives, and adjuvants to opioid therapy. The agreement summarizes and formalizes the mutually agreed upon understanding of how the COT should be used and managed. Although not mandated by law, prescribers may require a written agreement for all patients receiving COT to promote therapeutic adherence to the pain management regimen (Anghelescu et al., 2013).

Case Study

Mr. Johnson is a 57-year-old man diagnosed with stage IV T-cell/ histiocyte-rich B-cell lymphoma. He received intensive chemotherapy, which caused neuropathic pain in his feet and lower legs. The advanced practice nurse (APRN) initially treated his neuropathy with gabapentin and added duloxetine for additional relief. After dose escalations...
about the risks of misuse and abuse and responsible use of opioids to increase their awareness. Following these discussions and actions, Mr. Johnson and the APRN signed a patient–provider agreement. After reviewing the state’s prescription drug monitoring program database, the APRN noted that Mr. Johnson has never received any controlled substances from any provider. The APRN prescribed Mr. Johnson oxycodone 10 mg, one tablet every four hours, as needed for pain.

Mr. Johnson’s neuropathic pain improved significantly. Although the APRN reemphasized the importance of safety and assessed Mr. Johnson’s response to COT at each clinic visit, she monitored for aberrant behaviors. With all data from the Addiction Behaviors Checklist, the prescription drug monitoring database, periodic UDTs, pill counts, and pain medication diaries, the APRN did not indicate misuse or abuse of opioids. Following best evidence, the APRN considered the various sources of data collected through screening and monitoring mitigation strategies and controlled Mr. Johnson’s pain with COT.

**Conclusion**

Patients who receive COT for the management of cancer-related pain are at risk for opioid abuse or misuse (Angelescu et al., 2013). Although standardization is lacking among prescribers who manage cancer-related pain (Carmichael et al., 2016), APRNs must practice according to the available evidence, which suggests assessing and monitoring for abuse and misuse (FDA, 2017; NCCN, 2017). APRNs should meet a minimum threshold of risk mitigation by considering the multiple sources of data collected through screening and monitoring for every patient who receives COT to facilitate safety for patients and families.

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**References**


