What Question Set is Most Effective to Screen Chronic Pain Patients for Potential Opioid Abuse?

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Behavioral Health Matters

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Summary
The Screener and Opioid Assessment Measure for Patients with Chronic Pain (SOAAP) and the Opioid Risk Tool (ORT) are both validated tools that screen for future problems with prescription opioids. The ORT has been more rigorously studied and is able to identify low-, moderate-, and high-risk populations. (SOR B, based on a single validating cohort study.)

The Evidence
Despite the effectiveness of opioids in treating chronic pain, many physicians are reluctant to prescribe them due to fear of either creating or supporting addiction. But data indicate that increased monitoring of patients at risk can cut future opioid abuse by 50%.

A brief screening tool that could accurately predict aberrant behaviors would be useful.

Screener and Opioid Assessment Measure for Patients with Chronic Pain (SOAAP)
The SOAPP was created by a panel of 26 pain and addiction experts who, through consensus and concept mapping, generated 14 questions intended to predict future opioid misuse. In a validating cohort study, the SOAPP was administered to 175 patients with chronic pain who were prescribed opioids at a tertiary pain clinic. Ninety-five of these patients were then successfully followed for 6 months. Signs of aberrant behavior or abuse (eg, patient report on the Prescription Drug Use Questionnaire, staff reports, abnormal urine toxicology screens) were recorded, enabling researchers to identify high-risk patients.

Using a cutoff score of 7, the SOAPP predicted future aberrant behavior with a sensitivity of 91% and a specificity of 69% (PPV 0.71, NPV 0.90, LR+ 2.94, and LR –0.13). Patients classified as low risk with this test would be unlikely to display aberrant behaviors. Unfortunately, this test would also result in a significant number of low-risk patients falsely classified as high risk. The key weakness of the study was that only 54.3% (95/175) of the patients were successfully followed.

Opioid Risk Tool (ORT)
The ORT was developed using a different scoring criteria for men and women. In a validating cohort study, 185 new patients referred to a tertiary pain clinic completed the ORT. Patients were risk stratified as low, moderate, or high for aberrancy based on the 5-item questionnaire (TABLE) that was created based on the authors’ clinical experience and their review of the literature. Patients were then treated with a variety of opioids and anticonvulsants. They were monitored over 1 year for aberrant behaviors, such as soliciting opioids from other providers, requesting refills instead of visiting the clinic, and abnormal urine/blood screen results.

After 1 year, only 1 of the 18 low-risk patients (5.6%) ever exhibited an aberrant behavior; 28% of the moderate-risk patients displayed aberrancy, and 40 of the 44 high-risk patients (90.9%) displayed aberrancy.

The c-statistic, which assesses sensitivity and specificity, was used to measure the predictive validity of the ORT. The observed c-statistic in men was 0.82 and in women 0.85, both of which are considered excellent discrimination.

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in the salmeterol group \((P=0.044)\). This study was funded by a manufacturer of montelukast.

A small \((n=10)\), 5-week, double-blind, randomized controlled crossover trial evaluated the effects of salmeterol, montelukast, zafirlukast, zileuton, and placebo on treatment of exercise-induced asthma among young adults with chronic asthma. Each participant performed exercise while breathing cold, dry air 1, 4, 8, and 12 hours after receiving the test drug in a laboratory setting. Salmeterol increased the FEV1 by 13.3\% in the first hour, montelukast increased FEV1 by 4\% after 1 hour (and a maximum of 7\% at 4 hours), while placebo, zileuton, and zafirlukast had no effect on FEV1. Salmeterol and montelukast provided a 70\% reduction in bronchoconstriction, compared with a 57\% reduction with zafirlukast and 52\% reduction with zileuton. This study was funded by the National Heart, Lung, and Blood Institute and a general clinical research grant from the National Center for Research Resources of the National Institutes of Health.

Another small \((n=16)\), 3-week RCT of young adults with chronic asthma and exercise-induced bronchoconstriction compared fish oil supplementation with placebo. The treatment group took 1,000 mg fish oil daily (containing 3.2 g of eicosapentaenoic acid and 2 g of docosahexaenoic acid) and maintained a strict diet. Fish oil supplementation was associated with attenuation of bronchoconstriction and reduced rescue medication utilization (45 puffs in fish oil group compared with 61 puffs for normal diet and 65 for the placebo diet, \(P<0.05\)). The fish oil was not compared with any other medication.

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**REFERENCES**