

Suboxone Versus Methadone for the Treatment of Opioid Dependence

Context

Opioid dependence is related to the misuse of both illegal opioids, such as heroin, and prescription opioids, such as codeine-containing Tylenol, oxycodone, and morphine. Treatment of dependence involves stabilization, detoxification, and maintenance. During detoxification, methadone or buprenorphine are provided as a substitute for misused opioids until the patient is no longer dependent.

Technology

Methadone is a long-acting opioid agonist. It is available as a powder, which is dissolved in a liquid for the patient to drink, or as a premixed solution (1 mg/mL). Methadose (10 mg/mL) is a commercial methadone solution, prepared at 10 times the concentration of standard methadone. Suboxone is a fixed-dose combination of buprenorphine (partial agonist at the mu-opioid receptor) and naloxone (opioid antagonist). It is delivered as a tablet slipped under the tongue. Taken orally, buprenorphine alone is absorbed into the bloodstream. However, if Suboxone is crushed and injected, naloxone will enter the bloodstream and cause abrupt withdrawal symptoms (vomiting, diarrhea, muscle cramps).

Issue

Suboxone is typically reserved for patients for whom methadone is contraindicated. An updated review of the clinical evidence, including non-randomized controlled trials (RCTs) and cost-effectiveness data, will help to inform decisions about the use of Suboxone for patients with opioid dependence.

Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria.

Key Messages

- Suboxone had as similar an effect as methadone, with:
 - patients staying on treatment
 - patients not using opioids while on treatment
 - cognitive performance
 - adverse events.
- Suboxone showed a similar cost-effectiveness to methadone in Australia and was more cost-effective than methadone in Greece.
- The risks and benefits of Suboxone for treating special populations such as pregnant women or children are not known.

Results

The literature search identified 121 citations, with no additional articles identified from other sources. After screening the abstracts, 28 studies were deemed potentially relevant, with 8 unique clinical studies meeting the criteria for inclusion in this review: 4 RCTs, 2 non-RCTs, and 2 economic evaluations.

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