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Supervised Injectable Opioid treatment (hydromorphone)

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Summary

The Victorian government should consider introducing hydromorphone as a supervised injectable opioid treatment to supplement traditional therapies for opioid dependence.

Background

Opioid Agonist Therapy (**OAT**) is the gold standard treatment for opioid dependence and is the primary method for treating opioid dependence in Australia. OAT reduces opioid use, overdose risk, drug-related criminal offending and mortality among patients while improving health and social outcomes.

While traditional OAT medications (methadone or buprenorphine) are effective for the majority of patients, approximately 5-10% of opioid dependent people do not find benefit.[1] In Australia, there are no alternative treatments for this group.

Several countries provide hydromorphone as a Supervised Injectable Opioid Treatment (**SIOT**) to supplement traditional OAT treatment programs.

Supervised Injectable Opioid Treatment

SIOT involves the prescription and administration of a short-acting, injectable opioid medication (usually hydromorphone or diacetylmorphine) for the management of opioid dependence for patients that (i) have a severe opioid dependence and (ii) have not benefitted from first line treatments for opioid dependence. The medication is administered on-site by the patient, supervised by a medical professional. SIOT is strictly regulated: take-home administration is not available.

Countries with SIOT programs include Switzerland, [2] Belgium, Spain, Canada, Denmark, Germany, the Netherlands and the UK.[3] In the UK, prescription diacetylmorphine for opioid dependence has been available since 1926.[4]

SIOT is most effective when provided in conjunction with other supports (i.e. social housing, health and mental health).

Hydromorphone

Hydromorphone is a short-acting opioid medication suitable for use in SIOT treatment. It is currently available in Australia for the treatment of moderate-to-severe pain.

The benefits of using hydromorphone for SIOT include:

- Hydromorphone is a TGA-approved medication with several products already available;
- Research suggests hydromorphone as a SIOT medication is associated with fewer adverse events (compared to diacetylmorphine).[5]

Evidence

Multiple Randomised Control Trials (RTCs) of SIOT have been conducted in the UK, several European nations, Canada and the US.[6] A significant body of research evidence supports SIOT as a supplement traditional OAT programs. Some key findings on SIOT include:

- Increased reduction in drug-related criminal offending and incarceration among patients compared with traditional OAT treatments.[7] [8]
- Increased reduction in non-medical use of opioids, treatment cessation, overdose and all-cause mortality compared to traditional OAT. [9] [10] [5]
- SIOT (hydromorphone) associated with reduced incidence of adverse events compared to SIOT (diacetylmorphine). [3] [5] [6]
- Higher patient retention rates than traditional OAT programs (77% for hydromorphone, 45% for methadone and between 30-50% for buprenorphine/naloxone).[6]
- Highly cost-effective:
    - Reduced costs associated with crime, criminal justice procedures and imprisonment.[2]
    - Reduced associated, non-criminal justice costs: housing, healthcare, social services.[11]
    - A mean saving of €12,793 per person per year for clients on SIOT compared to clients on traditional OAT (Netherlands). [12]
    - Other research demonstrating cost-effectiveness from Britain,[13] Canada,[14] the Netherlands, [8] Germany, [11] [15] Switzerland,[16] [17] [18] and Spain.[19]

Further, due to administration occurring in a supervised medical setting, there is no evidence that SIOT medications are likely to be diverted for illicit use.[5] [20]

Conclusion

There is increasing recognition globally of the benefits of SIOT as an effective supplement for traditional OAT programs.[21] In 2018, there were 22 SIOT clinics operating in Switzerland and 17 in the Netherlands. [3]

Furthermore, several TGA-approved hydromorphone products including injectable formulations are already available in Australia. As such, hydromorphone as SIOT faces few regulatory barriers for use in the treatment of opioid dependence.

Clinical guidelines for short-acting injectable OAT must be developed for Victoria. These can be adapted from jurisdictions that have introduced SOIT, such as British Columbia in Canada.[22]

VAADA recommends the Victorian government consider introducing SIOT (hydromorphone) to supplement Victoria's existing OAT regime.

Disclaimer

While efforts have been made to incorporate and represent the views of our member agencies, the position and recommendations in this paper are those of VAADA.

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