Hydromorphone as OAT

Victorian Opioid Management ECHO
Department of Addiction Medicine
St Vincent's Hospital Melbourne 2020

Issue

Opioid agonist treatment is the most effective way to support opioid use disorder and has been proven to improve morbidity and mortality

Buprenorphine and methadone based treatments are effective and have large bodies of evidence for their use.

Between 50-70% of patients on Suboxone or Methadone will leave treatment within the first 6-12 months

Many patients will return to treatment several times before successful abstinence long term.

Between 1-8% of all opioid dependent patients will not maintain stability on usual OAT modes

Another option

- **Diacetylmorphine**
  - Clinical name for prescription heroin
  - Controlled, prescribed substance
  - Quality assurance
  - 70-90% retention in treatment at 1 year

Cochrane review of available studies shows

- Heroin provision with oral methadone available increased retention in treatment and improved mortality
- Heroin provision alone vs all other treatments improved retention in treatment and tended toward favouring heroin for mortality

Diacetylmorphine

Where available – prescribed, controlled dispensing, supervised injection

Improves health outcomes, reduces crime rates, reduces mortality

Available in: UK for >100 years, Switzerland since 1994 – national referendum in 2008, 68% of voters supported permanent institution of iOAT. Germany, Denmark and the Netherlands have also recently added it as a treatment modality

Not available in Australia for use as a treatment for any conditions.

Blocked by government a number of years ago.

Need to find an alternative…

Enter hydromorphone

Full opioid agonist

Effect ratio of 2:1 diacetylmorphine:hydromorphone

Currently available as analgesic preparation in many countries (incl Australia)

Has oral and injectable formulations

Half-life of 2.3 hours post injection. DAM half-life is 0.5 hours

British Colombia iOAT guideleines: https://www.bccsu.ca/wp-content/uploads/2017/10/BC-iOAT-Guidelines-10.2017.pdf

Proof?

SALOME trial completed in Canada and published in 2016

Compared 6 month outcomes between DAM and Hydromorphone in a supervised setting

Non-inferiority trial

Showed that hydromorphone was as acceptable as DAM and retained patients in treatment equally effectively

- Similar number of days of illicit use and positive urinalysis

Patients were unable to determine which treatment arm they were in.

Oviedo-Joekes E, Guh D, Brissette S, et al. Hydromorphone Compared With Diacetylmorphine for Long-term Opioid Dependence: A Randomized Clinical Trial. *JAMA Psychiatry*. 2016;73(5):447-455. doi:10.1001/jamapsychiatry.2016.0109

Treatment Mode

Currently used in Canada for those patients unable to maintain abstinence on other OAT forms.

Treatment is supported via addiction specialists or other specialty centres that provide substance use disorder treatment

Guidelines exist around eligibility, dose selection, assessment and administration of medication

Eligibility

Capacity to consent and understand the goals of treatment and risks of medication

Diagnosis of severe OUD

Past experiences with oral OAT at appropriate doses and ongoing use despite these and failure to remain in treatment

Significant risk of medical complications of ongoing injecting drug use

18 years of age or older

No co-prescribed BZD or Z-drugs

No active moderate or severe alcohol use disorder

Typical prescribing

Titrated based on SALOME study

Maximum doses per day – 3

Maximum daily dose - 500mg

Maximum mg per dose – 200mg

Administration of doses are supervised self-injection with pre- and post- injection assessment and supervision

Titrated over a 3-5 day period to aim for minimum effective dose for the patient.

Considerations

Need to have available supervised injection facility

Need to have specialist support

Need to have contingency management for travel, missed doses and ongoing illicit use

Can plan for de-intensifying treatment

Must consider co-morbidities, other substance use issues, new or developing health conditions, cognitive/psychological conditions that may affect ability to self-inject

Key Points

Hydromorphone is already licensed in Australia as an analgesic

iOAT has been shown in Europe to be suitable and safe for some patients

Hydromorphone has been shown to be not inferior to DAM as an iOAT modality

May benefit the portion of the population that cannot maintain stability with oral formulations

Requires close supervision and planning to maintain safety

Thoughts?