

PROTOCOL #43 – Maternal Fetal Medicine, University of New Mexico

Methadone Therapy During Pregnancy

Methadone is the established treatment of choice for the treatment of pregnant women addicted to narcotics (i.e. heroin; prescription narcotics). It is generally agreed that the prenatal risks of opiate withdrawal are greater for the fetus than in utero exposure to methadone at the lowest effective dose. The dose of methadone should be individualized based on signs and symptoms of withdrawal, craving, ability to maintain abstinence from opiates, and side effects. At the Milagro clinic, we use a standard scoring sheet to determine whether a dose increase is justified.

A. Starting and Maintenance Doses

- Regardless whether the therapy is begun on an inpatient or preferably outpatient basis, the starting dose of methadone is typically 20–30 during the first day, then increased 5–10 mg per day to a maximum of 60 mg in the first 4–5 days.
- Since methadone is long-acting, the patient does not receive the full effect of the dose until five days, and if the dose is pushed too rapidly she could overdose and die from cardiorespiratory complications.
- Based on serum trough levels, a daily dose of 60 to 120 mg of methadone is believed to be adequate, although higher doses may be required during the third trimester because of physiologic changes.

B. Electrocardiogram

- A pretreatment EKG should be done to measure the QTc interval with follow-up in 30 days or if the patient has syncope or seizures.
- If the interval is >450 but <500 msec, please discuss risks and benefits of methadone and monitor the EKG more closely for arrhythmias.
- The dose may be continued but not increased if the QTc is prolonged.

C. Acute Withdrawal

- Patients usually obtain relief from acute withdrawal with a daily dose between 40-60 mg. Demanding higher doses may be part of the addiction process.
- Caution is to be exercised with rapid dose increases, since methadone has a long half-life 24-36 hour and a steady state requires 5 half-lives.

- Make sure she is not on other prescription or over-the-counter medications that could reduce her methadone levels.
- You may treat them symptomatically i.e. acetaminophen for muscle aches, trazodone for sleep, and vistaril for anxiety. If problems persist warranting other psychoactive drugs, then an inpatient psychiatric consultation is recommended.

D. Prenatal Counseling About Newborn Care

- Infants exposed to methadone maintenance in utero have shown lower birth weights and head circumferences.
- The infant will be closely examined up to 72 hours in the hospital.
- In our experience about 70% of exposed infants manifest signs of Neonatal Abstinence Syndrome (NAS) which requires methadone supplementation.
- Methadone-exposed infants are within the normal range of cognitive function at 1- and 2-year evaluations but may have lower developmental levels than comparison groups. There are many confounding factors. It is unclear whether these differences are caused by the methadone or by medical, psychiatric, and socioeconomic differences between mothers who are opioid dependent and those who are nondependent.

E. Breast Feeding

- Breast feeding is acceptable during maternal methadone therapy in the absence of other drug use. An analysis of the literature indicates that low levels of methadone are transmitted in breast milk, regardless of the mother's dose.
- Delayed neonatal abstinence signs, transmission of maternal viral infection (HIV, hepatitis), polysubstance use, and participation in continued treatment must be considered in the decision-making process.

See Protocol 43A_ for guidelines on outpatient initiation/maintenance of methadone under 72 hour federal regulations.

CONSULTATION: Twenty-four hour consultation is available by calling the Maternal-Fetal Medicine service at the University of New Mexico Hospital, 1-888-866-7257.