

# What Do You Do When There Is No Evidence?

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# Reinstatement After Missed Doses of Methadone

- A patient on methadone 150mg/qd misses 3 days of medication. How do you reinstate?
- How about missing 5-7 days?
- How do you make a decision about returning doses to original dose?
- How quickly do patients lose their tolerance for their dose such that over-sedation becomes a risk with too rapid re-induction ?

# Reinstatement After Fee or Jail Withdrawals

- Patients frequently are placed on unplanned withdrawals either because they can't pay fees or because they are incarcerated. In either case they frequently pay their fees or get out of jail and need to have their original dose resumed.
- A patient on 120mg undergoes a 21 day withdrawal (a decrease of 12mg every 2 days) and is reduced to 24mg and needs to be returned to their 120mg dose. How quickly or slowly should this be done?
- What is a safe re-induction schedule?

# Missing Methadone Doses

- A patient on 100mg has missed 10 of 30 days of dosing due to transportation problems. He misses weekends because the bus schedule doesn't allow him to make dosing hours. He occasionally uses Vicodin pills to 'get him through'. He has stopped using heroin.
- How would you handle this?
- He is given his usual 100mg on Monday after missing 2 days. Would you do this?

# Emesis in Pregnancy

- The dispensing nurse witnesses a pregnant patient on 120mg of methadone vomit her dose within a minute after dosing.
- Would you replace the dose and how much would you give?
- What if the emesis occurred 5 minutes after dosing?
- How about 20 minutes after dosing?
- How quickly can you expect most of the dose to clear the stomach?

# Emesis and Pregnancy

- 26 y/o pregnant woman in stable long-term recovery conceives on methadone and develops recurrent emesis in last trimester. On step 6 but comes in on weekend requesting re-dosing because she 'had to take her weekend take home dose early because she vomited immediately'. This scenario repeats itself.
- Anti-emetics not effective; sugar-free and tablet methadone not helpful. How would you handle this situation?
- Protonix, post-partum resolved the nausea.

# QTc Dilemma

- A 71 y/o patient stable on 125mg of methadone, split 50/75 presents to the ER with loss of consciousness, pulse 174, QTc 510. Dx: supraventricular tachycardia, ST abnormality.
- After cardioversion: pulse 91, QTc 464, non-specific ST abnormality.
- 4 hrs later: pulse 71, QTc 465, normal EKG
- He returns to the clinic feeling normal and does not want to change his dose. Should you alter his dose? How would you follow him clinically?
- QTc at rapid pulse rates becomes difficult to interpret.

# Welcome to the QT Machine

- 52 y/o female on 150mg methadone admitted to ER 5/6/08 with chest pains and palpitations, dx: hiatal hernia.
- EKG: pulse 95, QTc 598
- Meds: micardis, atenolol, zyprexa, premarin, spironolactone, baclofen. Followed by cardiologist for angina.
- Cardiologist called. He reports recent EKG with QTc of 440 on 4/21/08. Re-reads the ER EKG as normal and says machine read U wave as part of QT. Reports this is not an infrequent problem with machine-read EKGs
- Serum methadone on 8/16/08 was 430ng/ml
- Her dose was lowered 10mg over her objections. Would you lower more?

# QTc Confusion

- 55 y/o male on 90mg methadone between 2004-6. Hx of cocaine abuse and 'cardiac arrhythmias' but in 2006 incarcerated.
- Returns 1/17/08 with hx of being seen in ER 1 day prior with chest pain and fainting spells, Dx: esophagitis, rx'd with pepsid. EKG from ER: p 88, QTc 491, RBBB, possible inferior infarct.
- Started and held on 30mg. EKG 1/28: p 80, QTc 540, ST-T abnormalities, lateral ischemia. Cardiologist says hold does at 30mg till Echo done.
- Echocardiogram 2/7/08: Dx cardiomyopathy, LVEF 40-45%

- EKG 2/14/08:QTc 424, p 49, bradycardia, RBBB, inferior infarct.
- On 3/20 switched to Suboxone 20mg, QTc 414 on 4/28. Read as 'normal' EKG. UA positive for cocaine and amphetamines.
- Back on methadone 6/08/08, QTc 458 on 7/11, with PVCs, possible myocardial ischemia, IV conduction defect.
- Held on methadone 40mg. Using heroin and wants to go back to 90mg where he wasn't using. 10/7/08 EKG: QTc 421, bradycardia. What would you do with his dose?

# QTC and Co-Occurring Disorders

- 36 y/o female with bi-polar disorder, panic disorder, and opiate addiction. Stabilized on methadone 120mg, Invega 6mg, paxil 25mg.
- All have potential QT prolongation.
- What kind of monitoring would you do?
- Who is responsible for monitoring, the methadone provider or the psychiatrist?

# Dilantin and Methadone

- 44 y/o female on methadone 15 years, stable on 140mg Step 6, presents to ER with seizure put on Dilantin 300mg TID.
- Experiences acute onset of withdrawal, within 3-4 days and dose raised to 200mg over 3 weeks, split 100/100.
- 3 weeks later neurologist stops Dilantin (not a seizure), clinic reduces dose to 90/90, but patient c/o withdrawal. Serum level 265mg a few weeks later. Continues on 90/90 for 16 months.

- Hospitalized with pneumonia, dosed at 60/60, returns to clinic grossly over sedated but complaining of withdrawal. Dose decreased to 50/50. Drug screen negative.
- How quickly does Dilantin change methadone metabolism and how quickly does it revert, or does it always revert to previous level? Does pneumonia affect methadone?

# Alzheimer's and Methadone

- 68 y/o male with progressive memory problems maintained at home with live in caretaker who brings him to the clinic. No family available. On methadone 90mg and on twice weekly pickup. Clinic attendance is a hardship.
- Memory impairment so severe that counseling not possible except with caretaker. Drug abuse is not remotely likely.
- Would you withdraw the patient? Is that ethical if patient resists? How would you handle confidentiality? Who controls the methadone?

# Chronic Alcohol Abuse

- A patient reveals to his counselor that he has been drinking 1-2 6 packs a day for a period of months. He has not been grossly impaired when presenting to dispensing. He reports a gradual escalation of his drinking and that he feels he can't stop.
- You have no detox facility that will take a patient on methadone. He's not impaired enough for a hospitalization.
- He wants a dose increase because he feels the methadone isn't holding.
- How do you handle his methadone and his alcoholism?

# Concurrent Alcohol Abuse

- A patient on 100mg presents to dispensing smelling of alcohol and is referred to medical staff.
- BAT is .04 and patient is not showing any signs of impairment.
- What do you do about the methadone dose?
- Would it be different if the BAT were .09?

# Concurrent Benzodiazepine Abuse

- A patient on 100mg presents to dispensing with signs of sedation and is referred to the medical staff for evaluation.
- When evaluated the patient is totally alert and angry for not being dosed.
- BAT is negative
- Insta-test is positive for benzodiazepines and negative for other drugs.
- The patient has a legitimate script for lorazepam.
- Would you dose the patient. If so how much?

# Missing Doses of Buprenorphine

- A 20yr old patient on 20mg of buprenorphine misses 13 days. He presents in withdrawal and reports using 80mg of oxycodone 2 days earlier.
- How much buprenorphine would you give him?
- He got 20mg and missed the next day. Would you be concerned?

- The next day he is seen and says he feels fine, denies any sedation from the 20mg, says it took away all his withdrawal, and reports that buprenorphine lasts for 2-3 days, much longer than methadone.

# High Methadone Serum Level and QTc

- 57 y/o male on 95mg had serum ordered because he appeared sedated: 510ng 3/9/09
- Asymptomatic and doesn't 'feel oversedated', reports past EKG and old records showed QTc was 502ms on 7/07. Current Meds: dicloxicillin (for chronic osteomyelitis), lasix, potassium, spironolactone.
- What more would you do?
- Repeat EKG 4/09 QTc 463ms, read as 'normal'

# Reversing a Split Dose

- 26 y/o pregnant female on methadone 80 BID because of oversedation and pregnancy.
- She loses her exception TH for positive tests.
- She was oversedated on a single dose and splitting the dose was effective. But.....
- How would you reverse the split?

# Methadone and Pregnancy: How Much is Too Much?

- 32 y/o in recovery, working, conceives on 120mg/day and almost immediately experiences withdrawal at the dose at which she was stable.
- Serial dose increases of 10mg every 1-2 weeks never quite stabilizes her. Serum levels remained therapeutic at about 500ng as the dose was increased to 270mg.
- She delivered.

- What would you expect the risks for NAS would be in this case?
- Would you have used this much methadone?