

Biological Impacts HIV, Hepatitis C Other infectious diseases & abscesses Malnutrition Cardiomyopathy, Hypertension, Pulmonary fibrosis, Hepatic cirrhosis, Esophagitis, Gastritis, Pancreatitis... Trauma Overdoses Multiple drug dependencies Death

Objectives

- Common opioid induced side effects
 and comorbidities
- Common lifestyle related comorbidities
- Increased mortality in addiction disease
- Methadone impact on that mortality

Causes of Death Our patients die of: Mi's, strokes Overdoses Infections – HIV, Hepatitis C, Bacterial Trauma Murder

What is the Impact of Addiction?

Negative and Holistic

Opioid Side effects Sedation/ Respiratory Depression Constipation Poor dentition

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Skin MRSA common Abscesses Chronic ulcers Scabies Bed bug bites

Case 1

- Needs antibiotic refuses to go to hospital
- Cover for MRSA
- Trial of Bactrim DS 1 tab po bid
- Follow up in 24 hours

Case 1

- 30 y.o female presents with complaint of fever and chills
- Complaining of pain in her left forearm
- She is wearing long sleeved shirt
- Refuses to pull up her sleeves

HIV

- A chronic viral infection
- Treatable to the point of patients able to live a normal lifespan
- Methadone allows for stability
- Allows for diagnosis, engagement and treatment
- Treatment non detectable viral load – decreased spread

Case 1

- Large abscess size of egg on her forearm
- Local anesthetic and drained for copious amount of purulent fluid
- C and S

HIV

- Treating addiction opens the door to testing for HIV and Hep C
- Patients may not get tested otherwise
- Addiction treatment engages patient into care
- Methadone allows for regular appointments

HIV

- Like other chronic diseases regular blood work necessary – q3 months
- CD4, viral load,
- Need to monitor renal function as well if on antiretroviral therapy

Hepatitis C

- Methadone allows for stability and the ability to treat.
- Genotype 1,2 now 99% cure rates
- Genotype 3 98% cure rates
- Methadone allows for adherence, cure will decrease spread if relapse
- Burden of liver disease projections are huge

Case 2

- 23 y.o female presents for methadone induction
- Only uses opiates
- Screening blood work offered and patient agrees to have it done

Hepatitis C Treatment is expensive Once cured can reinfect Stability is important prior to treatment Methadone allows for that stability

Case 2

- Western Blot comes back HIV
 positive
- Patient follows up for methadone induction
- Time spent discussing diagnosis
- Initial blood work obtained including CD4/CD8, viral load and resistance testing

Case 3

- 36 y.o. male stable on methadone for 1 year
- Chronic Hepatitis C
- Genotype 1
- Viral load 600,000
- Fibroscan F3

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Case 3

- Patient qualifies for ledipasvir/sofosbuvir
- 8 weeks treatment
- End of treatment HCV viral load non detectable

Case 4

- 27 y.o female HIV positive IVDU off and on methadone 3 times in past year
- Ongoing opiate and stimulant use

Infective Endocarditis

- Difficult to treat
- Multiple infections destroy heart valves
- Increase congestive heart failure
- Injection of crushed tablets increase valve damage
- Injection of stimulants increase valve damage

Case 4

- Presents to ER short of breath, pedal edema and febrile
- CD4 25
- BP 88/45
- Admitted echo shows large vegitation on aortic valve

Infective Endocarditis

- If history of IE or murmur on exam then cardiac echo is warranted
- Increased congestive heart failure
- Edema common also in liver failure as well
- Usually need 6 weeks iv antibiotic therapy

Case 4

- 2 week stay in ICU
- Patient codes unsuccessful resucitation

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COPD

- Most have a history of smoking
- Seems earlier onset in addiction population
- Most start smoking at a young age
- Age 8 10 for many



Talc Lung

- Talc induced granulomas mainly caused by injection of tablets
- Results in pulmonary hypertension and cor pulmonale
- Cure usually lung transplant



- High dose methadone can interfere with breathing
- Suboxone is often the better choice
- Low dose methadone in palliative setting very helpful



COPD

 Due to decreased mobility due to dependence on oxygen – carries may be granted earlier

Pulmonary emboli

- Septic emboli
- Common with tricuspid endocarditis
- Life threatening

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Mortality

- High mortality rates
- Recent research shows life span in the US is now lower due to increasing deaths secondary to overdoses

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Mental Health

- Multiple comorbidities
- Crystal meth use bringing out more psychosis

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