Dietetic Internship Clinical Case Study

Alcohol Withdrawal

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Summer 2011

Introduction

- Alcoholism is such a common condition that virtually every clinician is confronted with its complications

- There are an estimated 8 million alcohol-dependent people in the United States

- Approximately 500,000 episodes of withdrawal severe enough to require pharmacologic treatment occur each year

Introduction

- Alcoholism in the VA population
  - Veterans have nearly 2.5 x the lifetime prevalence than Non-vets
  - Factors
    - PTSD- coping mechanism for stress
    - Military culture- often used in past for bonding during service
    - Homelessness and other social issues

Alcohol Withdrawal

What is it?

Alcohol Withdrawal

- Set of symptoms seen when a person reduces/stops EtOH consumption after prolonged periods of excessive intake
- Excessive abuse of EtOH leads to tolerance, physical dependence, and symptoms of withdrawal following discontinued use

Alcohol Withdrawal

- Symptoms of EtOH withdrawal
  - Occurs because alcohol is a central nervous system DEPRESSANT
    - EtOH both enhances inhibitory tone & inhibits excitatory tone
    - After chronic abuse only constant presence of EtOH preserves homeostasis
- Abrupt cessation unmasks the adaptive responses to chronic use *resulting in OVERACTIVITY of the CENTRAL NERVOUS SYSTEM*

Alcohol Withdrawal

- Signs and Symptoms
  - CNS-related symptoms
    - Insomnia
    - Tremors
    - Anxiety
    - GI upset
    - Headache
    - Sweating
    - Palpitations

- Severe symptoms
  - Withdrawal seizures
  - Alcoholic Hallucinosis
  - Delirium Tremens
    - Hallucinations
    - Global Confusion
    - Marked motor activity
    - Severe disruption of sleep

Case Study

Case Study: PC

- Nutrition Assessment

- General Info
  - 60 y.o. white male
  - Unemployed, lives in SLC with fiancé
  - Master's degree in Business
  - No religion stated
- Anthropometrics
  - 6'2"
  - Weight history: range from 147 – 173 lbs (2009-present)
    - Admission wt: 153 lbs

Medical History

- Atrial Fibrillation/Flutter
- Mitral valve prolapse
- Congestive Heart Failure
- Stroke
  - Current warfarin Rx
- Hypertension
- Hyperlipidemia
- Hx of polysubstance abuse
- PTSD
- Depression
- Lactose Intolerance
- Hx of multiple EtOH detoxes
  - Hx of Delirium Tremens

Current Admission

- Pt reports recent increase in PTSD symptoms with nightmares & flashbacks leading to a loss of sobriety after 6 months
- Previously hospitalized in May 2011
  - Highland Ridge Hospital in Midvale, UT (Psychiatric & addiction treatment center)
- Endorses drinking “2 pints of vodka daily” with persistent PTSD symptoms
- “Very much would like to get sober”

PTSD

- Post Traumatic Stress Disorder
  - Anxiety disorder occurring after a traumatic event with risk of injury or death
  - **Symptoms**:
    - “Reliving the event” which disturbs daily living
    - Avoidance/Emotional Numbing
    - Prolonged Arousal (eg easily startled, exaggerated response, insomnia)

Relevant Labs

- Albumin:
  - 3.7 (6/8/11)
  - 4.1 (5/31/11)
  - 3.0 L (5/8/11)
- AST: 45 H (6/8/11)
- ALT: 88 H (6/8/11)
- WBC: 14.02 H (6/8/11)
- INR: 0.8 (6/8/11) – non-therapeutic

Hospital Course: Jun 8- Jun 15

- Mental Health Unit
- Treatment:
  - EtOH withdrawal
    - WAS protocol, w/ Ativan Rx (benzodiazepine: anti-agitation med)
    - Pt endorsed A/V hallucinations throughout stay
    - Nutrition: Thiamine and folate supplement daily
  - PTSD
    - Citalopram for PTSD & depression
    - Prazosin for nightmares
  - Anticoagulation Therapy
    - Donexaparin bridging
    - Warfarin

Hospital Course: Jun 8- Jun 15

- Dietary Treatment
  - Diet PTA: Fair appetite, eating only ½ of meals, inconsistent intake due to EtOH intake
  - Current wt was 82% of IBW, BMI 19.9, recent wt. loss of 8% in 2.5 months
  - Diagnosed with lactose intolerance in 2009
  - Sent LACTOSE-FREE diet with Ensure TID
    - Included standard 3A HS snack (≈500 kcals)
    - Did not drink Ensure, d/c'd
    - Increased portion size

Hospital Course: Jun 8- Jun 15

- Discharge: June 15
  - No reported withdrawal symptoms
  - Steady on feet
  - Ambulating well around the MH ward

  - Pt to continue follow-up with Alcoholics Anonymous

Admission: Jun 21

- Per ED note, patient drank EtOH within 2hrs of discharge and was “drinking nonstop for last 4 days”
  - 1 pint or more of vodka per day
- Fell several times day before admission
  - Head abrasion
- Admitted to Acute Medicine
  - MH deemed pt “too intoxicated/delirious for 3A admit”
  - Treatment plan
    - EtOH detox: CIWA, banana bag

WAS vs CIWA

- Two scales for assessing alcohol withdrawal symptoms
- WAS: Withdrawal Assessment Scale
- CIWA: Clinical Institute Withdrawal Assessment

WAS

- Used by VA MH for many years
  - Possibly developed in-house
- Includes vital signs
- Still used by some MD's in MH unit
- Score is used on a pt by pt basis
- Being phased out for CIWA

CIWA

- Standard scale used throughout MH field
- All "subjective" questions
- Standard scoring: >15 indicates need for pharmacologic intervention

“Banana Bag”

- IV fluid containing vitamins and minerals
  - Thiamine & Folate
  - “rally bag”: thiamine, folate, and magnesium

- B-vitamins are commonly depleted in alcoholics
  - EtOH replacing meals, reduced absorption of existing vitamins
  - Thiamine: Wernicke’s encephalopathy, Korsikoff’s Syndrome
  - Folate: Megaloblastic anemia

Update since last admission

- Current wt: 150 lbs
  - 79% IBW
  - BMI 19.3
- Albumin: 2.8 L
- Tube feeding consult:
  - Poor intake, tremors/slowed motor movement d/t EtOH detox interfering with swallowing

Diagnosis

- Problem:
  - Inadequate oral food/beverage intake
- Related to:
  - EtOh intake PTA and current EtOH detoxing resulting in decreased nutritional intake
- As evidenced by:
  - Current NPO status and detox status

Diagnosis

- Problem:
  - Involuntary weight loss
- Related to:
  - Psychological issues: EtOH intake interfering with appetite/intake
  - Physiological issues: EtOH detoxing and NPO status
- As evidenced by:
  - Wt loss of 8% in 1.5 months

Nutrition Intervention

- Enteral Nutrition
  - Promote formula @ goal rate of 85 mL/hr
    - 2040 kcals (Harris-Benedict needs: ≈2000 kcal at 150 lbs wt)
    - 127.5 g PRO
    - 1700 mL water
  - Add 400 mL extra water for fluid needs
- Appropriateness/Compliance of diet order

Monitoring

- CIWA discontinued
  - Librium meds are tied to CIWA scores
  - Fluctuating CIWA scores resulted in high doses of Librium, despite stable vital signs
    - Subjectivity of CIWA?
- Speech Therapy (7/1/11)
  - Swallowing Evals
    - Recommending advancing diet to full liquid diet with some pureed foods
- Nutrition modifications (7/1/11)
  - D/C Ensure, send Enlive, decrease tube feedings to PM only

Monitoring

- 7/3/11
  - Discontinued Dobhoff Tube
  - Advance to Regular diet textures
- 7/5/11
  - Pt reports having a good weekend
  - Significant physical improvements, can walk independently
  - Tolerating regular diet
  - Planned discharge today
    - Plan to attend AA
    - Follow-up with MH outpatient for depression & anxiety

Summary

- Patient with recurrent EtOH abuse and subsequent detox
- History of PTSD
- Discharged in late June 2011 only to come back 5 days later
- MH mentioned a good support system with friends and fiancé
  - "Renewed resolve to attend AA meetings"
- Future appointments:
  - July 12 MH appointment: No Show
  - Next appointment: July 20 @ Primary Care

References

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