Managing Alcohol Withdrawals in Acute Inpatient Psychiatry

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Guidelines for Acute Psychiatric Wards managing alcohol withdrawals

- Taking an alcohol history
- Identify those at risk of/ developing alcohol withdrawal syndrome (AWS)
- Achieve safe physical withdrawal from alcohol
- Prevent development severe alcohol withdrawal syndrome (AWS)
- Prevent onset of Wernicke-Korsakoff syndrome
- Manage withdrawal seizures and delirium tremens if they emerge
- Optimise physical healthcare
- Enhance continued maintenance of abstinence

Alcohol History /Assessment

- Screening tools
  - AUDIT 20+ indicates severe dependence
  - Alcohol Dependence SADQ score 15-30 moderate, >30 severe
- Consumption – historical and recent units
- Previous history of escalating severity, withdrawals seizures, delirium tremens
- Withdrawals with medically assisted withdrawals
- Physical health inc signs/ symptoms of liver disease, frailty, WKS
- Other drug misuse inc over the counter
- Cognitive function
- Readiness to change
- Risk assessment
- Investigations LFT, GGT, FBC, U&E, PT/INR, Mg
- **Breathalyzer ***

ICD-10 Alcohol Withdrawal

Clear evidence recent cessation/ reduction alcohol

Three or more of following:

1. Tremor
2. Sweating
3. Nausea/ Vomiting
4. Tachycardia/ Hypertension
5. Psychomotor agitation
6. Headache
7. Insomnia
8. Malaise
9. Transient hallucination/ illusion
10. Grand mal convulsions

Benzodiazepine treatment regimes

FRONT LOADING

FIXED DOSING SCHEDULE

SYMPTOM - TRIGGERED THERAPY

<u>COMPLICATIONS</u>

UNCONTROLLED WITHDRAWALS

DELIRIUM TREMENS

SEIZURES

ELDERLY / LIVER DISEASE

Elderly/ Liver disease

- In those who are elderly or with severe liver disease there are problems with metabolising long acting benzodiazepines and a risk of benzodiazepine toxicity due to acCumulation.
- In individuals who are elderly and frail or those with significant liver disease (jaundice, bilirubin > 50, Childs Pugh B) the following regime should be followed
- Oxazepam Hourly CIWA triggered PRN dose of Oxazepam 30mg for first 24 hours no standard regime. Alternative Lorazepam 1mg CIWA triggered
- After 24 hours identify dose required to control symptom this is the starting dose for the detoxification or continue PRN Symptom triggered

NICE Headline Recommendations

Selection for inpatient admission

High risk delirium/ seizures

Avoid sudden cessation drinking in dependent individuals

Lower threshold for admission e.g elderly, frail, cognitive impairment, comorbidity, under 16

Treatment of Withdrawal

Offer benzodiazepine or clomethiazole or carbamazepine

Hepatology advice required with decompensated liver disease requiring detoxifciation

In-patient Symptom- triggered regimen if 24 hour assessment and monitoring available

Frontloading regime

Assisted withdrawal from alcohol

Steps

1. Identify high risk withdrawal patients at assessment interview. (See later)
2. Admission breathalyzer and CIWA-Ar record on proforma/ ICIS
3. Breathalyzer reading (BAC) > 200mg% (BrAC 87mcg%) and CIWA-Ar < 10 repeat breathalyzer and CIWA-Ar in 1 hour
4. If BAC > 200mg% (BrAC 87mcg%) and CIWA-Ar > 10 give 20mg Chlordiazepoxide and repeat BAC and CIWA Ar in 1 hour N.B Likely to be high risk detoxification
5. If CIWA Ar > 10 commence detoxification Chlordiazepoxide 20mg qds

Assisted withdrawal from alcohol (cont.)

6. If BAC < 200mg% (BrAC 87mcg%)and CIWA-Ar > 10 commence detoxification Chlordiazepoxide 20mg q.d.s.(standard detoxification).
7. Continue standard detoxification (unless high risk) Hourly CIWA Ar ratings.
8. Every occasion CIWA Ar > 10 give PRN dose of Chlordiazepoxide 20mg.
9. Greater than 5 doses of PRN in 48 hours contact SHO or on call to increase standard detoxification.
10. CIWA Ar scores and detoxification regime to be reviewed by doctor at 48 hours

Delirium Tremens

Severe complication of alcohol withdrawal (Victor and Adams 1953)

Symptoms emerge several hours- days after cessation or reduction in alcohol

Symptoms peak 48-72 hours

Tremor

Hallucinations (auditory, visual, olfactory)

Confusion

Associated delusions, insomnia, agitation

Tachycardia, hyperthermia, hypertension, tachypnoea

Risk factors for DTs

Predisposing **various authors**	Positive predictors **Palmstierna T, 2001; Sweden**
Severe dependency, High BAC when withdrawals occur Drinking pattern Abrupt cessation of intensive drink Kindling processes eg prev DTs Recent epileptic seizure Concurrent medical problems Metabolic abnormalities Use of sedative-hypnotic drugs Older age Male sex	Infectious disease Tachycardia at admission >120 Withdrawals with BAL > 1g/L=7 units History of epileptic seizures History of delirious episodes **Lee J et al, 2004; Korea** **59/ 147 patients developed DT** History of delirium tremens Tachycardia >100 bpm • 20% dev DTs if no risk factors • 46% dev DTs if one factor present • 100% if both factors present

Management of delirium tremens

1. Use of prediction rating scales to identify high risk individuals
2. Physical examination; tachycardia >120 whilst positive breathalyser reading >0.5 with severe withdrawals on CIWA-Ar
3. Active investigation of causes of confusion, pyrexia, raised WBC, CRP, MSU, sputum, ?CXR, Mg levels, BM, serum anticonvulsants (day 1 and 3)
4. If high risk group, commence CDZ 50mg qds + serial CIWA-Ar; if severe range give an additional 20mg PRN
5. Correct Magnesium levels with MgAsparate or MgSO4

Management of established delirium tremens

1. Continued assessment delirium
2. Fluid balance; daily U/E, Mg, bone profile
3. IV Pabrinex extended for further 3 days and reviewed
4. Administer oral Lorazepam 2-4mg. If symptoms severe or oral medication is declined, give IM/IV Lorazepam or IV Diazepam 30 – 60 minutes until sedated
5. Prominent psychotic symptoms Haloperidol 1 – 5 mg orally or IM 8 hourly or Olanzapine 10mg orally
6. Rapid tranquillisation policy
7. MHA
8. Criteria for transfer to the medics

Withdrawal Seizures

Generalised Tonic-Clonic Seizures

7-48 hours after cessation alcohol

Often several seizure rarely status

Role of Electrolytes K, Mg

History of previous seizures in withdrawal/ history epilepsy

TREATMENT

Increased dose CDZ/ DZP 40mg/ 20mg

Continue anticonvulsant if treatment for epilepsy

? Role CBZ as effective as CDZ at preventing seizures

Current practice treatment seizures rectal diazepam/ buccal midazolam/IM lozazepam

NICE Clear guidance to use oral/ parenteral lorazepam to treat and prevent further seizures

Kindling

1. Severity of withdrawals correlates :
    - Amount alcohol consumed
    - Duration of consumption
    - Number of withdrawal episodes *

2. Withdrawal seizure correlate with number previous withdrawals

3. Effects on GABA, Glutamate and neuronal death

Kindling- clinical implications

1. Careful withdrawal history >5 may need inpatient treatment.
2. To detox or not detox- maximise the chance of success (information, stage of change, practical issues, detox support, follow-up arrangements, activities and prescribing).
3. Limiting detoxifications.
4. Kindling and relapse.
5. Cognitive dysfunction and brain damage.
6. Neuroprotective strategies -alternatives to benzodiazepines, acamprosate?

NICE Headline Recommendations

Delirium Tremens

If delirium tremens develops review management

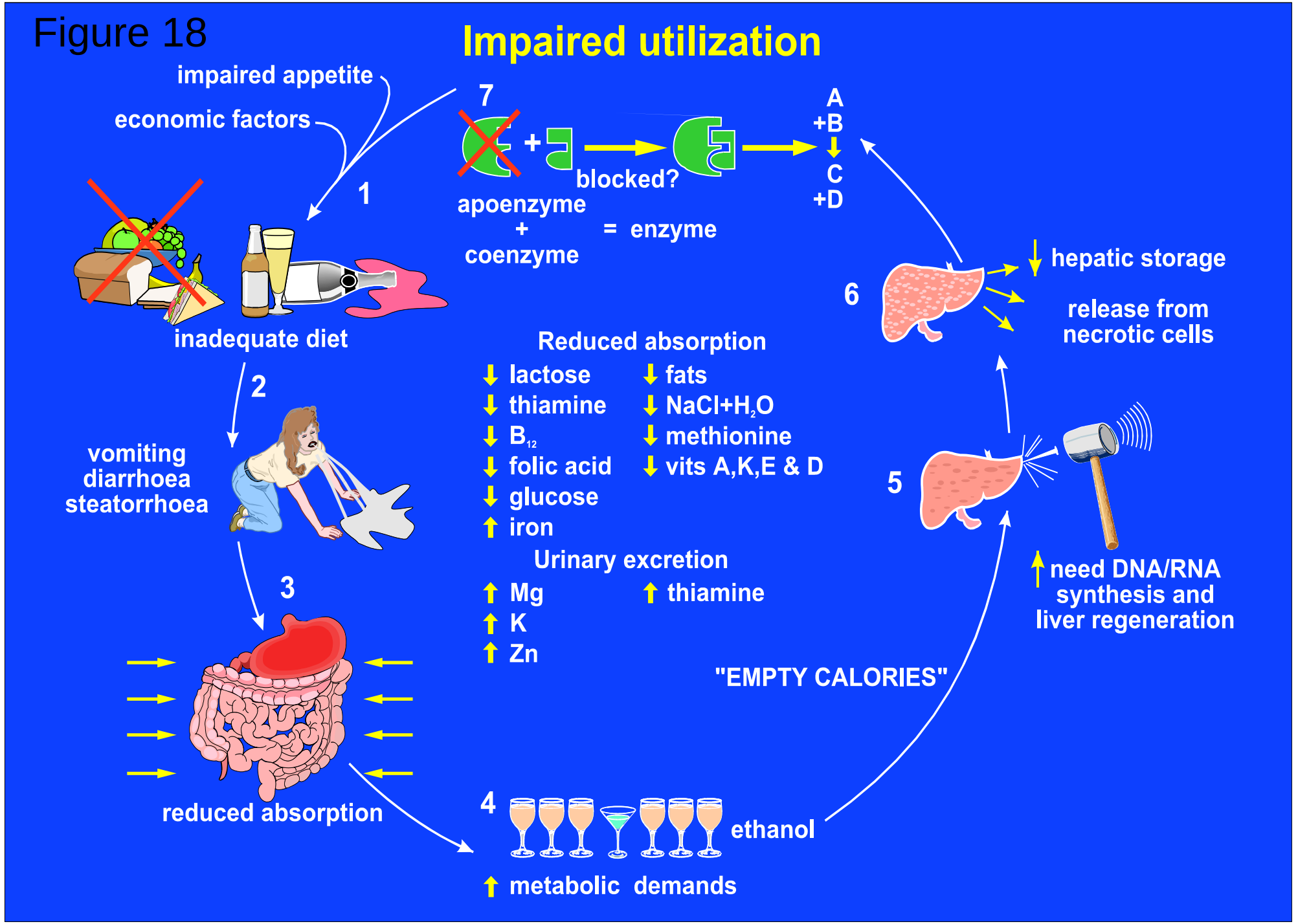
Oral lorazepam as first line 2nd line parenteral lorazepam, haloperidol or olanzapine

Seizures

If seizures develop review management

Use quick acting benzodiazepine such as lorazepam to reduce likelihood of further seizures

Figure 18


Impaired utilization
impaired appetite
economic factors
1
inadequate diet
2
vomiting
diarrhoea
steatorrhoea
3
reduced absorption
4
ethanol
metabolic demands
5
need DNA/RNA synthesis and liver regeneration
6
hepatic storage
release from necrotic cells
7
apoenzyme + coenzyme = enzyme
blocked?
A +B C +D
Reduced absorption
lactose
thiamine
B12
folic acid
glucose
iron
fats
NaCl+H2O
methionine
vits A,K,E & D
Urinary excretion
Mg
K
Zn
thiamine
"EMPTY CALORIES"

Prevention

ASSESSMENT OF AT RISK GROUPS

- ? ALL PATIENTS REQUIRING INPATIENT DETOXIFICATION

i] **<u>INCIPIENT OR ESTABLISHED</u>** **<u>WERNICKE</u>** **<u>ENCEPHALOPATHY</u>**

CONFUSION + / - ATAXIA, MEMORY DISTURBANCE, OPTHALMAPLEGIA, COMA, OFTEN PRESUMPTIVE DIAGNOSIS

ii) **<u>AT RISK GROUP</u>**

HISTORY/CURRENT SEVERE WITHDRAWALS

VERY HEAVY CONSUMPTION

POOR DIET WEIGHT LOSS

PERIPHERAL NEUROPATHY

iii) **<u>LOW RISK GROUP</u>**

WELL NOURISHED LOWER LEVEL CONSUMPTION

NO HISTORY SEVERE WITHDRAWALS

WKS Treatment

1. INCIPIENT WERNICKES
   2 PAIRS PABRINEX AMPOULES (= 500 MG THIAMINE) TDS BY IV INFUSION FOR 3 DAYS
   FOLLOWED BY 1 PAIR PABRINEX AMPOULES OD BY IM FOR FURTHER 3 - 5 DAYS

2. AT RISK GROUP
   I PAIR PABRINEX AMPOULES (= 250 MG THIAMINE) OD BY IM FOR 3 - 5 DAYS
   N.B. IV ROUTE MAY BE USED e.g. BLEEDING DIATHESIS

3. LOWER RISK GROUP
   THIAMINE 50 MG ORAL QDS
   VITAMIN B COMPLEX STRONG 2 TABLETS TDS

Maintaining abstinence

- Referral to local Community Alcohol Services
- Support AA, NA
- Support activities on line support advice
- Medications always consider prescribing drugs to help maintain abstinence, e.g. Acamprosate, Naltrexone, Disulfiram, Baclofen.