ALCOHOLISM

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Overview

Alcohol use, abuse, and dependence are significant causes of morbidity and mortality. Educating patients about low risk drinking guidelines and screening for problem alcohol use can lead to reductions in alcohol consumption.

Low risk drinking guidelines[2]

No more than 2 standard drinks on any one day

Women: up to 9 standard drinks a week

Men: up to 14 standard drinks a week

Diagnostic considerations[1]

Definitions

At-risk drinking: ≥ 4 drinks (women) or ≥ 5 drinks (men) on ≥ 1 day(s) in the past year

Alcohol abuse: Meeting ≥1 DSM IV criteria for abuse in the last 12 months

Dependence: Meeting ≥1 DSM IV criteria for dependence in the last 12 months

Abuse: If yes to ≥1 , consider abuse and assess for dependence:
1. Role failure (missed work or class?)
2.Risk bodily harm (drinking and driving?)
3. Legal issues (DUI, MVC?)
4 Relationship trouble (people complain about your drinking?)

Dependence: If yes to ≥3 = dependence
1. Tolerance (drink more for the same effect?)
2. Withdrawal (irritability, anxiety, shakes, sweats, nausea, vomiting?)
3. Drinking limits (drinking more than you plan)
4. Failed to cut down (previous quit attempts)
5. Time (increasing time spent drinking/recovering from drinking?
6. Spending less time on other matters (family/friends/hobbies?)
7.Continued drinking despite problems?

Screening

Ask: Has your life ever been affected by alcohol? Has anyone said anything about your drinking? How long have you been drinking like this?

AUDIT3 (Alcohol use disorders identification test) and CAGE (cut down?annoyed?guilt?eyeopener?) can also be used for screening. Please see references for link to full AUDIT manual.

Screening questions

Q1. Do you sometimes drink beer, wine, or other alcoholic beverages? Yes →Q2 No →Why not? Identify a history alcohol misuse in patient or significant other +ve hx → How are you doing?

Q2. How many times in the past year have you had: 5 or more drinks in one day (men)? 4 or more drinks in one day (women)?
Answer negative: Review low risk drinking guidelines, expresses openness to talking about alcohol use, and rescreen annually.
Answer positive: considered at-risk drinking →Q3
Q3. On average, how many days a week do you have an alcoholic drink?
Q4. On a typical drinking day, how many drinks do you have?

Multiply Q3xQ4 for weekly average, document, and assess for alcohol abuse or dependence.

Red Flags

Any of these red flags should be a clinical trigger for screening for alcohol use, abuse and dependence.

Medical	Mental	Psychosocial
MCV>96	Cognitive impairment or decline	Unexplained times off work/loss of employment
↑GGT, AST, ALT (AST:ALT>2:1)	Mood, anxiety, or sleep disorder	Frequent no shows
GERD, HTN, DM, pancreatitis	Significant behavioural or academic changes	Poor medication adherence
Chronic non-cancer pain		Significant life event
Sexual dysfunction		Recent/recurrent trauma/abuse
Falls		High risk behaviours (gambling, DUI, STI)

Physical Findings

Smell of alcohol
Withdrawal symptoms: vomiting, diaphoresis, agitation, headache, tremor, seizures, hallucinations
Delerium tremens: ↑HR, ↓BP, ↑Temp, Delerium
Stigmata of liver disease: ascites, jaundice, clubbing, spider nevi, palmar erythema, gynecomastia, testicular atrophy, Dupuytren contractures, hepatomegaly/shrunken liver, splenomegaly

Dr. Michael Evans developed the One-Pager concept to provide clinicians with useful clinical information on primary care topics.

Management considerations[1]

Brief intervention for At-risk drinking

1. **State:** "You are drinking more than is medically safe. I think your drinking is putting your health at risk and is not good for you because (patient's concerns or medical findings)." And " I strongly recommend that you cut down or quit"
2. **Assess readiness to change drinking habits:** "Do you want to do anything about your drinking? "or "Are you willing to consider making changes in your drinking?"
3. **Patient ready to commit to change?**
   Yes: Help set goal, agree on plan, provide educational material.
   No: Repeat screen annually, link related health concerns to alcohol use, reaffirm your willingness to help

Brief intervention for Alcohol Abuse:

1. **State** "I believe that you have an alcohol use disorder. I strongly recommend that you stop drinking and I'm willing to help." (Relate to the patient's concerns and medical findings if present.)

2. Negotiate a goal and develop a plan:

- Abstaining is the safest course for most patients with alcohol use disorders.
- Patients who have milder forms of abuse or dependence and are unwilling to abstain may be successful at cutting down.

3. Consider referring to external or community resources:

- Alcohol and drug counsellor, addiction medicine physician.
- Community groups such as AA (Alcoholics Anonymous).

For alcohol dependence, as above, plus:

4. Monitor for withdrawal

15-20% of alcohol dependent drinkers require inpatient withdrawal. Consider inpatient referral if:
Red flags: hx withdrawal seizures or DTs, multiple failed attempts at outpatient withdrawal, unstable medical conditions/psych disorders, additional sedative dependence syndromes, liver compromise, pregnancy, advanced withdrawal state or failure to respond after 24-48hr of meds, lack of safe setting and care-giver to dispense meds)

- Give Thiamine 100mg PO daily
- Treat with benzodiazepines (diazepam 30mg po/IM daily then taper by 5mg daily until done or 10mg Q6h x 24 hours then 5mg q6h x 48h), or treat until CIWA4 score <10 (See reference link #4 for pdf of CIWA tool).
  If severe liver disease, severe asthma or respiratory failure: Lorazepam SL 1-2mg tid-qid.[4]
- Daily follow-up x 3-4 days

5. Prescribe medications for alcohol dependence (see below)

- No medications are covered by Ontario Drug Benefits (ODB), patients must pay

6. Arrange follow-up

- Consider seeing patient at least once every 14 days in initial period.

Pharmacotherapy for alcohol dependence[1]

Medication	Mechanism of action	Contraindications	Dosing
Naltrexone $$$ (For treatment of alcohol dependence to support abstinence and decrease relapse risk)	Blocks opioid receptors which partially cause the euphoria associated with alcohol use. Stops cravings. Efficacy >12 weeks not established Can be used to help cut down consumption (without abstinence)	Concurrent opiate use (or use within 7 – 10 days) Liver failure/cirrhosis Safe in mild-to-moderate liver impairment[5]	Start 25 mg daily x 3 days then increase to 50 mg daily Efficacy >12 weeks not established
Acamprosate $$$ (For maintenance of abstinence)	Reduces chronic withdrawal symptoms Start in patients who have detoxed and are now abstinent	Severe renal impairment CrCl<30 ml/min, pregnancy	666mg TID (333mg TID if mild to moderate renal impairment or wt <60 kg) Treat x 1 year
Disulfiram $ (For deterring alcohol use) Only available from a compounding pharmacy	Inhibits metabolism of alcohol resulting in ↑ acetaldehyde levels causing flushing, nausea, vomiting, uneasiness/ anxiety	Ongoing alcohol use Heart disease, CVD, renal/hepatic failure, pregnancy, psych disorders	500mg daily x 7 days then decrease to maintenance dose of 250 mg daily Can try 125mg daily if good effect with higher dose. Continue until social recovery - can be used months to years.[6]

Pharmacotherapy for alcohol withdrawal[1]

Diazepam (outpatient use, should have daily follow-up)	Binds postsynaptic GABA neurons.[7] Reduces withdrawal symptoms and risk of seizure. If sufficient loading dose given, no taper required due to long half-life.*	Contraindicated in severe liver disease and severe asthma or respiratory failure[4]	Inpatient: 20 mg PO q1-2H until symptoms abate Outpatient: 30 mg PO/IM daily +/- 5 mg per day taper* or 10 mg q6h x 24 hours then 5 mg q6h x 43 hours
Lorazepam (outpatient use, should have daily follow-up)	Same as above except: Shorter half life = longer duration treatment Safer in hepatic insufficiency and respiratory disease	Severe respiratory insufficiency[8]	1 - 2 mg SL tid -qid

* Taper may be beneficial if persistent withdrawal symptoms since less aggressive early dosing as outpatient

Bottom Line

Alcohol use and abuse are common. Screening should be part of routine preventative care and all patients should be educated on the low risk drinking guidelines. For patients with at-risk drinking, abuse, or dependence, brief interventions in the clinic, community resources, and pharmacotherapy should be used to reduce morbidity and mortality.

References can be found online at http://www.dfcm.utoronto.ca/programs/postgraduateprograme/One_Pager_Project_References.htm