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| **Alcohol** | |
| * **Common names**: Booze, liquor, drinks, cocktails, nightcaps, moonshine * **Trade names:** Ethyl alcohol, beer, gin, rum, vodka, bourbon, whiskey, liqueurs, wine, brandy, sherry, champagne4 * **Other sources can include**: Mouthwash, hand sanitizer, vanilla extract, Chinese cooking wine, cough syrup, perfumes/ colognes/ aftershave, spray odour neutralizers, disinfectants11 | |
| **Characteristics**  **(Depressant)** | * Alcohol alters the function of several receptors and cellular functions, including GABAA receptors, Kir3/GIRK channels, adenosine reuptake, glycine receptor, NMDA receptor, and 5-HT39 * Effects of alcohol have a close relationship with blood alcohol levels; impaired judgment and impulsivity can occur with levels of 4-6mmol/l (20-30mg/100ml); levels of 17mmol (80mg/100ml) are associated with slurred speech, incoordination, unsteady gait, and inattention. Higher levels can intensify cognitive deficits, aggressiveness, and cause blackouts7 * Elimination is about 10g of alcohol per hour (about 30ml/one oz. of whiskey, or one bottle of beer) 7. Blood alcohol level declines by 3-7mmol/l per hour (approximately 15mg/100ml)5 * Men and Women metabolize alcohol at different rates. 12 * Alcohol metabolism is proportional to body weight (and liver weight)5 |
| **Presentation during intoxication** | **Common signs and symptoms of intoxication can include4,5**:   |  |  |  |  | | --- | --- | --- | --- | | Relaxation | Loss of inhibitions | Slurred speech | Staggering gait | | Drowsiness | Slurred speech | Flushed skin | Lack of concentration | | Impaired attention | Slowed reflexes | Double or blurred vision |  |   **Extreme intoxication signs and symptoms may include4:**   |  |  |  |  | | --- | --- | --- | --- | | Inability to stand | Vomiting | Stupor | Possible coma | | Shallow respirations | Cold clammy skin | Weak and/or rapid pulse |  | |
| **Monitoring and support during intoxication** | **Goal13,14:**   * Prevent severe respiratory depression and aspiration of vomitus   **Monitor9,10,15**   * Assess level of disorientation and if possible time of last ingestion and amount consumed * Monitor for falls risk * Monitor vitals every 15 minutes initially and less frequently as acute symptoms subside * Monitor glucose levels due to risk for hypoglycemia and alcohol ketoacidosis   **Supportive Interventions9,10,15:**   * Ensure a quiet private space * Frequently orient client to reality and surroundings * Promote fluid and food intake as tolerated * Thiamine / Vitamin B1 may be prescribed to decrease the risk of Wernicke-Korsakoff syndrome |
| **Withdrawal presentation**  (appears within 6-24 hours after stopping alcohol, are most severe after 36-72 hours and last for 2-10 days)**4** | **Symptoms may include1-5:**   |  |  |  |  | | --- | --- | --- | --- | | Increased anxiety | Agitation | Hypertension | Diarrhea | | Insomnia | Hallucinations | Tachycardia | Seizures\* | | Increased Irritability | Tremor and Psychomotor Agitation | Nausea and Vomiting | Delirium Tremens\* |   **Delirium Tremens (DTs) Characteristics8 :**   |  |  |  |  | | --- | --- | --- | --- | | Gross Tremor | Paranoid Ideation | Hyperthermia | Distractibility | | Confusion/ Disorientation | Hallucinations | Extreme agitation or restlessness | Autonomic Instability (changes in HR/BP) |  * A medical emergency that can lead to cardiovascular collapse * Autonomic hyperactivity may develop 48-96 hours after last drink2 |
| **Monitoring and support during withdrawal** | **Goal**1,2**:**   * Short term:   + Preserve respiratory and cardiovascular function   + Reduce the risk of DTs * Long term15:   + Client will not experience injury   **Assessing for Withdrawal Severity**1,2**:**   * Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar)   **Monitor**1,2**:**   * Mental Status (include risk of self-harm and suicide, presence of hallucinations including tactile, agitation, anxiety) * Physical status (including perspiration, headaches, vital signs, electrolytes) * Risk for falls * Hydration/Nutrition * Sleep patterns   **Supportive interventions**   * Encourage fluids and nutrition as tolerated * Provide a calm and quiet environment * Administer medications to treat acute symptoms of withdrawal and reduce the risk of DTs   **Medications Suggested Include**1,2**:**   * Benzodiazepines(i.e. diazepam, lorazepam, chlordiazepoxide) 🡪 taper dose down as CIWA-Ar score lowers1,2 * For individuals with liver disease, accumulation of longer-acting benzodiazepines (i.e. chlordiazepoxide/Librium) may be problematic – therefore use of more shorter-acting benzodiazepines is recommended15 * Thiamine / Vitamin B1 to decrease the risk of Wernicke-Korsakoff syndrome1,3 * In cases of severe dehydration IV fluids with potassium and magnesium have been provided4 |
| **Potential Complications** | **May include:**   * **Korsakoff Syndrome/Wernicke Encephalopathy** (lack of thiamine/vitamin B1 as a result of alcohol use) 1,3   + Wernicke encephalopathy: confusion, loss of muscle coordination   + Korsakoff syndrome: memory loss, confabulation, hallucinations * **Hallucinations**1,2   + Visual/auditory/tactile 🡪 12-48 hours after last drink2 * **Seizures**1,2   + Can occur 6-36 hours after last drink2 * **Delirium Tremens** **(DTs)** 1,2 (see above) |
| **Notable Drug Interactions7** | |  |  | | --- | --- | | **With Antidepressants7** | **With Opioids 7** | | * Alcohol may exacerbate the CNS effects (i.e drowsiness, confusion, gait disturbance, dizziness, and impaired motor coordination) of tricyclic antidepressants, and cause impairment in psychomotor performance * Alcohol may disrupt antidepressant metabolism * Alcohol and MAOIs increase the risk of a hypertensive crisis due to tyramine content. | * Additional CNS effects * Caution with excessive doses to risk of respiratory depression * Speeds the release of some opioids into the bloodstream by dissolving the slow-release system | | |  | | --- | | **With Antipsychotics7** | | * Alcohol may increase CNS effects of the antipsychotics used and worsen extrapyramidal effects. | | **With Cannabis 10**   * Increased impairment of judgement * Additive effects | | **With Benzodiazepines7** | **With Stimulants** | | * CNS effects of benzodiazepines will be potentiated 🡪 Increased risk of respiratory depression | * Additive effects of stimulant * Increased heart rate   Variable effect on blood pressure | | **With Mood Stabilizers7** | **With GHB 7** | | * With Lithium, increased tremors may occur with chronic alcohol use | * Synergistic CNS depressant effects can occur, with high doses of GHB causing respiratory depression | |
| **Psychiatric effects** | * Chronic use of alcohol induces depression and increases the risk of suicide due to alcohol-induced depression, impulsivity and lack of judgment associated with acute intoxication * Chronic use of alcohol can also induce or exacerbate anxiety disorders and psychosis 6 * Alcohol can induce memory blackouts, nightmares, insomnia, hallucinations, paranoia, intellectual impairment, dementia, and Wernicke-Korsakoff syndrome.7 * Chronic alcohol use by clients with schizophrenia has been associated with more florid symptoms, more re-hospitalizations, poorer long term outcomes, and increased risk of tardive dyskinesia 7 |

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