Alcohol Abuse/Dependence and Depression: Double Trouble

Introduction:

Persons who have an Alcohol Use Disorder commonly suffer from other disorders at the same time. Often this is referred to as "Dual Disorder" and as "Double Trouble" because the combined effects are usually worse than either condition alone (See Table 1). Alcohol Abuse/Dependence and depression are common comorbid conditions. The most frequent comorbid condition is alcohol plus tobacco addiction, whish has also been linked to depression. As many as 80% of alcoholics smoke, compared with about 30% in the general population[1]. One recent study reported that 50% of women and 33% of males with a history of alcohol use disorders have at least one other psychiatric disorder[2]. Following tobacco addiction, depression is the most common co-morbid psychiatric diagnosis in alcoholics[3]. Misdiagnosis of alcohol dependence and depression is common. Accurate diagnosis and treatment of the disorders are absolutely essential in preventing relapses to drinking and in preventing other adverse consequences, such as suicide among depressed alcoholics.

Dual Disorders: Double Trouble
•Drug use and drug addiction can be separate diseases from psychiatric illness; neither protects the person against the other. They can also be related •Psychiatric illness can cause relapse of a successfully treated addictive illness. •Psychiatric illness can cause temporary drug use, relapse or addiction even in people without any history or risk of addictive illness. •Psychiatric illnesses can precipitate an episode or even a life-long addiction •Double trouble: psychiatric illness and drug abuse make either more resistant to treatment. •Drug use is often mistaken for a psychiatric illness. Drug withdrawal can cause temporary psychiatric symptoms even in people without any history or risk factors •Drug withdrawal can mimic a psychiatric crisis.

Alcohol and Tobacco

Alcohol consumption and smoking commonly go together. As mentioned, rates of smoking among alcoholics are almost three times that of the general population. Approximately 25% of smokers are dependent on alcohol, a rate much higher than found among non-smokers. Smokers also have much higher rates of depression than found in the general population. One recent study of psychiatric outpatients presenting for treatment of non-bipolar major depressive disorder, tobacco dependence was the most common lifetime individual disorder and the second most common current comorbid

disorder after anxiety[4]. In this study about 27% of patients with major depression were tobacco dependent. In a cohort study of 845 persons who had been treated for alcohol dependence, more than 25 % of the sample had died within 12 years[5]. Approximately half of the deaths were tobacco-related rate and one-third were related to alcohol. Because rates of tobacco dependence are higher among depressed patient and among patients with an Alcohol Use Disorder, screening patients for tobacco use may help identify patients who are alcohol dependent and those at risk of comorbid alcohol dependence and depression.

Alcohol and Depressive Disorders

Alcohol is both a depressant and a stimulant and depending on the level of consumption and time after drinking. Persons who are alcohol dependent are often misdiagnosed as depressed because many of the symptoms of alcohol dependence mimic depression. Some of these symptoms include reduced appetite, decreased energy and insomnia. As many as 80% of alcohol dependent patients complain of depressive symptoms, and one-third or more meet the criteria for Major Depressive Disorder. Alcohol intoxication, especially binge drinking, can also cause mood swings that mimic the "highs" of people with manic depression/bipolar disorder.

Depression and alcohol dependence go hand in hand. Alcohol can make depression worse, even intolerable, and as a result alcohol is often a factor in suicides. Untreated alcohol dependence is progressive and often fatal. Left untreated accidents may follow and innocent people outside of the family can and do suffer. A person who is depressed

may start drinking, and a person who is drinking may become depressed. Either way, the combination of alcohol and depression can lead to trouble.

Misdiagnosis:

How alcohol dependence is related to depression is not clear. Depression and alcoholism can present as two separate diseases and neither protects the person against the other. Family, twin, and adoption studies indicate that there is substantial inheritability in the etiology of alcoholism[6]. Depressive illnesses also run in families and appear to have an important biological basis. Affective disorders and alcohol dependence may share a common risk factor or factors that may be familial. Therefore the presence of one disorder may indicate an increased risk of the second[7]. For example, excess comorbidity between bipolar disorder and alcoholism has been observed. The two disorders may share a common risk factor or factors that may be familial and therefore the presence of one disorder may indicate an increased risk of the second[8].

Alcoholism may cause relapse in depressed patients and contributes to the course of the depressive illness. Depression, which has been successfully treated, may be relapsed by alcoholism. Psychiatric symptoms in patients with alcohol abuse may be temporally or medically related to acute intoxication, active disease, withdrawal, detoxification, and recovery[9]. Alcohol can cause temporary affective symptoms even in subjects with no history of clinically relevant depression[10]. Alcohol use produces the same subjective symptoms and objective signs required for the DSM-IV diagnosis of a Major Depression. Measuring depression based on the Hamilton Depression Rating Scale, Brown et al

reported 42% of inpatient male alcoholics scoring 20 or greater, with only 6% maintaining those scores after 4 weeks of abstinence and treatment[11]. Dorus et al reported 32% of alcoholics had met criteria for Major Depression on admission and after 3 weeks of abstinence they measured a 50% reduction in depressive symptoms[12]. Brown and Schuckit suggest dividing depressed alcoholics based on primary (symptom cluster which appeared first) and secondary (later appearing symptom cluster) qualifiers for the two diagnoses. After a 3-week abstinence, the group with primary alcoholism/secondary depression showed a 49% reduction in depressive symptoms. The group with primary depression/secondary of alcoholism that showed only a 14% reduction[11]. Clearly, there exists a subset of depressed alcoholics who, if treated early with antidepressants, would falsely appear to have responded to the pharmacologic therapy.

Most recent studies are consistent with a continuum of alcohol-related problems and do not suggest the existence of separate etiologies for alcohol abuse and dependence[13]. While alcohol abuse and dependence may be related in a number of important ways, how alcohol abuse/dependence is related to depression is not as clear. Alcohol is a depressant drug. Its direct depressant property is greater at higher doses or when blood alcohol levels are falling. These mood changes have also been demonstrated in the face of expectations that alcohol consumption will elevate mood[14]. Other indirect depressant effects can also be attributed to the "alcoholic lifestyle". In chronic alcohol users the range of changes in mood, cognition, affect, and neurovegetative signs usually seen with depressive disorders may be entirely due to the effects of alcohol and drugs. Subjective complaints include sadness, dysphoria, hopelessness, worthlessness, self-blame, lethargy, and general mental

demoralization. Objective signs include depressed affect, psychomotor retardation, and sleep, sex, or appetite disturbances[15].

Depression can exacerbate alcohol abuse and most alcoholics entering treatment will exhibit significant depressive symptoms. Patients suffering from alcohol abuse or dependence often encourage misdiagnosis by acts of historical omission or absolute misrepresentation. Both depression and alcohol dependence are associated with considerable shame and stigma. Definitive laboratory testing is not currently available to help the clinician make a causative diagnosis and prescribe effective disease-specific treatment. However, no studies have shown that depressive disorders actually cause alcoholism. Early in the course of a depression, Schuckit suggests that patients display inconsistent drinking patterns and may actually consume less alcohol. Continued drinking in the face of alcohol-induced depression is a result of addiction to alcohol[16].

Depression can be considered a part of the natural course of addiction. Miller and Janicak consider depression associated with early recovery to be protective and healing. A grief reaction is considered normal and expected after a loss. Depression is an integral part of that process. The addict suffers losses of alcohol, drugs, or relationships. The benefit of treating that depression must be weighed against the risk of aborting a natural healing process[17]. The textbook of Alcoholics Anonymous, first published in 1939, contains a description of a prominent American businessman who received treatment from several American psychiatrists and even traveled to Europe where Carl Jung treated him. His alcoholism continued to progress until he began the process of 12-step recovery[18]. The

concept of depression causing alcoholism can be potentially dangerous to the patient with the disease of addiction. Treatment of addicts is usually difficult to initiate and maintain. An understanding that addiction is a disease facilitates this process. When patients who have well-developed rationalization and denial skills are allowed or encouraged to believe that their problems are the result of something other than their addiction, the disease continues to progress and treatment of their depressive symptoms is rarely successful[19].

Suicide:

In 1999, an estimated 730,000 people in the United States attempted suicide and 29,199 persons committed suicide[20]. Suicide is the 11th leading cause of death overall and the 3rd leading cause among 15 to 34 year olds[20,21]. The majority of people who attempt suicide and about 90% of suicide victims have a diagnosable psychiatric disorder[21]. Alcohol is the number one drug of abuse found in suicide and alcohol dependence is a common diagnosis among people who attempt suicide. Major depression and alcohol dependence are the most frequently diagnosed psychiatric disorders in patients who commit suicide. Substance dependence is the second most important risk factors in suicide attempts after age[22]. Seventy percent of alcoholics with co-morbid depression report that they have made a suicide attempt at some point in their lives and as many as 85% of individuals who commit suicide suffer from alcohol dependence or depression[23]. The reported the likelihood of suicide among those diagnosed with alcohol dependence is between 60 and 120 times that of persons without mental illness[24].

Alcohol intoxication can exaggerate depression and increase the likelihood of an impulsive act. Alcohol is commonly detected in suicide methods involving driving a moving vehicle or overdosing. Alcohol impairs judgment and lowers the threshold to attempt suicide, explaining its association with painful suicide methods. One case-control study examined the relationship between amount and frequency of drinking, drinking within 3 hours of a suicide attempt, alcoholism, binge drinking and near fatal suicide attempts and found a J-shaped relationship between alcohol exposure and near lethal attempts for all measures[25]. Other studies have reported that the association between depression and alcohol dependence is stronger than depression and alcohol misuse[26].

Patients with combined dependence and depression are at particularly high risk for suicide attempts. Alcohol dependent individuals have a 10% lifetime suicide risk among, a figure that is 5 to 10 times greater than the general population[27]. Alcoholics who attempt suicide are at significantly increased risk for repeat attempts. Approximately 15% to 20% of person with alcohol dependence will attempt suicide and 15% to 20% of those who have attempted suicide in the past will do so again the next five years[27]. Alcoholics who have been admitted to a psychiatric hospital have a 25-fold increase in suicide rate, which is the highest risk ratio for suicide of any subgroup of alcoholics[28].

Suicidality is reported to be disproportionately higher than other psychiatric symptoms in depressed alcoholics. Cornelius et al suggest that this higher level of acute suicidality found on initial evaluation results from an additive or synergistic effect of the two disorders[29]. In one study, as many as 85% of suicide victims suffered from depression

and/or alcoholism, and 70% of co-morbid alcoholics had made a suicide attempt in their lives. These attempts were often impulsive, involving little premeditation. Most reported drinking more on the day of their suicide attempt. Greater than 70 drinks per week and increased number of drinks per day was associated with suicide attempts[30].

Under-treatment of depression in alcoholism is a challenge for all physicians concerned with suicide prevention. In one study, alcohol and drugs were present in 96.5% of all suicides in the study year. Alcohol was detected twice as often in men as in women. Antidepressants were found in only19% of women and 4.8% of men suggesting failure to diagnose and treatment these complex patients[31]. Since depression and alcohol dependence are commonly found among suicide attempters and completers; and untreated depression remains a major cause of alcoholism relapse, accurate diagnosis and appropriate treatment is crucial.

Treatment:

Alcohol dependence and depression are the most common descriptors for suicide attempters. D*epressed alcoholics should always be screened for depression, suicide and be referred to a psychiatrist if needed*. Depression and alcohol dependence are at the top of the list of problems commonly requiring psychiatric treatment. Unfortunately, both are difficult to diagnose by physicians due to patient fears, stigma and the realities of busy office life. Treating one problem or the other is common, but in order to successfully treat alcohol dependence and depression it is important that health care providers diagnose and treat both of these problems.

Treatment of Alcohol Dependence

Treatment professionals have found that after two or three weeks of abstinence from alcohol and with good nutrition, the temporary depressive effects of alcohol dissipate. However, subgroups of alcoholics have true depression or manic depression, and it is critically important to treat these illnesses during alcohol treatment. If true depression is left untreated, many alcoholics will drop out of treatment and relapse to drinking. Alcohol abuse, alcohol dependence and depression are important risk factors for suicidal thinking or actions.

Despite the excessive costs, morbidity and mortality of alcohol abuse and dependence, physicians are not very good at diagnosis or detection in their patients[32,33]. Unless treatment of the co-morbid illness is essentially the same, diagnosis comes before treatment. Alcohol treatment is specific to alcohol abuse and dependence. Acute evaluation, detoxification, stabilization and treatment of the patient with alcohol problems may be accomplished in various settings based on the American Society of Addiction Medicine Patient Placement Criteria. The intensity of treatment and the degree of restrictiveness range from residential inpatient, day-stay or partial hospital, intensive outpatient, and low intensity outpatient settings. Other adjunctive treatments may include group and individual psychotherapy. Pharmacotherapy such as: Naltrexone, Acamprosate administered to non-depressed alcoholics results in significant decreases in alcohol consumption and in self-reported interest, desire, and craving for alcohol[34,35]. Contemporary treatment of alcohol dependence starts with intervention and diagnosis and

continues with relapse prevention augmenting medications plus a Twelve-step based treatment for complete remission and maturation. All patients should be encouraged to attend 90 meetings in 90 days.

The physician should monitor the patient for signs of relapse. Negative memories, guilt, depressive symptoms, and anxiety are commonly encountered by the alcoholic but can also precipitate relapse. Research suggests that the predominant precipitants of relapse are negative affects, frustration, anger, fatigue, boredom or stress. These may look and sound like psychiatric diseases, especially depression, masked by substance use that may become evident during early recovery. Depression remains difficult to diagnose in early alcohol recovery, but treatment of depression with antidepressant medications reduces relapse.

Treatment of Depression in Alcohol Dependent Patients:

Depression in alcoholics which is accompanied by suicidal ideation or plan, that has not improved after a period of abstinence and treatment, or which is recurrent, familial or severe enough to endanger the patient or their recovery requires the most aggressive treatment. Tricyclic antidepressants have been studied in depression associated with substance abuse, especially alcohol. Desipramine administered in a random double-blind placebo controlled trial to depressed alcoholics resulted in significantly less depression, a tendency toward longer abstinence periods, but no differences in abstinence rates reported[36]. Imipramine was reported to influence both depression and drinking behavior in an open trial with depressed alcoholics[37]. Tricyclic antidepressants and alcohol can be

a highly toxic and lethal combination[38]. In light of the previously described increased suicidality, tricyclics are not the ideal choice if other less toxic agents are shown to be effective. Lithium is not effective in treating depressed alcoholics[39 40].

Selective Serotonin Reuptake Inhibitor (SSSRIs) have also been studied for treatment of alcoholism and have a more favorable toxicity profile than tricyclics. Several studies suggest potential for improvement in both depressive symptoms and alcohol consumption /abstinence rates in depressed alcoholics[41]. Fluoxetine has been reported to improve both depression and alcohol consumption in suicidal alcoholics. The sexual performance side effects in a population with sexual and relationship problems and relatively slow onset of action of fluoxetine hinders its effective use in this co-morbid population[42]. Wellbutrin and also Effexor have been especially successful in the treatment of depressed and anhedonic patients with alcohol dependence. Both wellbutrin and effexor help with the anergia, anhedonia, and may reverse hypothesized abnormalities[43,44]. In addition, with the important comorbidity of alcohol and tobacco use[45], bupropion (Zyban) has other advantages when choosing treatment. Other atypical antidepressants have been studied in special situations. Buspirone improved anxiety, depression, and daily abstinence in a random double-blind placebo study of mixed anxious-depressive alcoholics[46]. Alcohol-using depressed males appear very sensitive to the sexual side effects of the SSRIs and may discontinue their use and drop out of treatment. We generally treat patients with major depression and alcohol dependence, double trouble patients, with effexor XR and augment, when necessary with wellbutrin or remeron. An adequate trial

of both dose and duration of antidepressant is necessary to most effectively treat the patient.

Summary:

Depression and alcoholism are exceedingly common problems in the United States today. There are clear data supporting their interrelationships. Identification of either depression or alcoholism should lead to more extensive search for the other. Accurate diagnosis is necessary to formulate effective treatment[47]. Treatment planning and implementation for either will be more effective if both are considered from the outset. Integration of addiction and psychiatric treatment produces more successful outcomes in regard to patient care and is more effective in terms of time and financial expense[48]. Often, depression in alcohol abusing or dependent patients is difficult to treat without a simultaneous and aggressive approach to both problems.

CME Test

1. What is the most common co-morbid psychiatric diagnosis in alcoholics?
   a. Suicide
   b. Depression
   c. Anti-social Personality Disorder
   d. Generalized Anxiety Disorder

2. As many as 80% of alcohol dependent patients complain of depressive symptoms, these symptoms include all of the following except
   a. reduced appetite
   b. decreased energy
   c. increased energy
   d. insomnia

3. There is a J-shaped relationship between alcohol exposure and near lethal attempts for
   a. frequency of drinking
   b. drinking within 3 hours of a suicide attempt
   c. alcoholism
   d. binge drinking
   e. all of the above

4. Depressed alcoholics should always be
    a. screened for depression
    b. screened for suicide risk
    c. referred to a psychiatrist if needed
    d. all of the above
    e. none of the above

5. The recommended treatment for comorbid depression and alcohol dependence is to
    a. detox the patient and then treat symptoms of Major Depression
    b. in-patient care and monitoring
    c. treat alcohol dependence, recommend Alcoholics Anonymous attendance (90 meetings in 90 days) along with an adequate trial of both dose and duration of antidepressant.
    d. initiate treatment with an antidepressant and see is symptoms of alcohol dependence resolve

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