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There are several medications that are often prescribed as part of an overall addiction treatment strategy. These are disulfiram, methadone, buprenorphine, naltrexone, and clonidine.

Disulfiram (Antabuse™) works by interfering with the metabolism of alcohol at the point of acetaldehyde formation. Acetaldehyde is a noxious substance, usually broken down quickly. When it accumulates in the body, resulting symptoms are flushed skin, nausea, vomiting, dizziness, weakness and changes in vital signs. Disulfiram must be used carefully with patients who have cardiovascular or liver disease. Any kind of contact with alcohol can trigger a reaction, so those who take Disulfiram must exercise caution with perfumes, shaving lotions, mouthwashes, and cough syrups. Anything with alcohol can be harmful, including cooking sherries, wine vinegars, and extracts. Disulfiram is best given while the patient is supervised by a family member, friend, or nurse. It has an effect for several days after the patient takes the last dose, providing some protection from drinking even if the patient stops taking it. The idea behind Disulfiram is to avoid a reaction by avoiding alcohol, although some patients do try at least once to drink alcohol while on the medicine. A few

patients do not have a reaction to this combination, and can drink alcohol while on Disulfiram without getting sick. Disulfiram's side effects include dizziness, sedation, changes in blood pressure or pulse rate, a bad taste in the mouth, and psychosis. Clinical studies have demonstrated that it can assist patients with their sobriety when administered in a monitored setting. The medicine may work best with binge drinkers.

Methadone (Dolophine™) is used to treat opiate addiction and has been one of the most controversial treatments in all of medicine. Methadone is a synthetic opiate that is addicting. It is frequently used as a maintenance strategy, administered daily. It is given orally, as opposed to the IV-route often used in opiate-dependence that exposes patients to infections such as hepatitis and HIV. The major arguments for its use are that people taking methadone can work and are less likely to have to resort to criminal activity. Methadone's side effects include sedation, dizziness, nausea, vomiting, and sweating. If the dose is too high, respiratory depression and cardiovascular collapse may occur. Very little methadone is diverted to "street use," but this remains of some concern. LAAM (levo-alpha-acetylmethadol) is a longer-acting derivative of methadone. It can be given less frequently than regular methadone. Thus, patients need come into the clinic only three times a week for LAAM. More recently, buprenorphine (Buprenex™) has been approved for use in treating opiate addiction. Unlike methadone and LAAM, buprenorphine is only a partial agonist at the opioid receptor. Therefore, it can substitute for opiates in addicted patients but may also precipitate withdrawal symptoms. Adverse effects include sedation and constipation. Buprenorphine is the only one of these treatments that

may be given by an appropriately trained physician in an office practice rather than in a specially licensed opioid treatment program.

Naltrexone (ReVia™) is an opiate antagonist that has been found to decrease drinking in people with alcohol dependence. A daily dose of naltrexone will partially block the intoxicating effects of alcohol. Some patients also report decreased craving for alcohol when they are taking this medication. Adverse effects include nausea, headaches, fatigue, restlessness, and sleep disturbances. The medicine is often given at mealtime to mitigate these effects. It should not be given to anyone on opiates because it blocks their effect. It may also be an effective treatment for other addictions, such as cocaine. Again, the biggest problem with effectiveness is compliance with the medication.

Clonidine (Catapres™) is a blood pressure medicine that works on the noradrenergic system. A number of symptoms of opiate withdrawal arise in the noradrenergic system, so this medicine can eliminate or reduce much of the discomfort of opiate withdrawal. Adverse reactions include dry mouth, drowsiness, dizziness, constipation, sexual dysfunction, and nausea.

References

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