

Sedatives and Hypnotics

Key Terms

ataxia
detoxified
hypnotic

sedative
soporifics

Chapter Objectives

On completion of this chapter, the student will:

- Differentiate between a sedative and a hypnotic.
- Discuss the uses, general drug actions, adverse reactions, contraindications, precautions, and interactions of the barbiturates and miscellaneous sedatives and hypnotics.
- Discuss important preadministration and ongoing assessment activities the nurse should perform on the patient taking a sedative or hypnotic.
- List some nursing diagnoses particular to a patient taking a sedative or hypnotic.
- Discuss ways to promote an optimal response to therapy, how to manage common adverse reactions, and important points to keep in mind when educating patients about the use of a sedative or hypnotic.

A **sedative** is a drug that produces a relaxing, calming effect. Sedatives are usually given during daytime hours, and although they may make the patient drowsy, they usually do not produce sleep. A **hypnotic** is a drug that induces sleep, that is, it allows the patient to fall asleep and stay asleep. Hypnotics also may be called **soporifics**. Hypnotics are given at night or hour of sleep (HS).

Sedatives and hypnotics may be divided into two classes: barbiturates and miscellaneous sedatives and hypnotics. The barbiturates are divided into several groups, depending on their duration of action:

- Ultrashort-acting (eg, thiamylal [Surital], thiopental [Pentothal]). The ultrashort-acting barbiturates are used as anesthetics (see Chap. 35). Single doses have a duration of 20 minutes or less.
- Short-acting (eg, secobarbital [Seconal], pentobarbital [Nembutal]). The average duration of action of the short-acting barbiturates is 3 to 4 hours.
- Intermediate-acting (eg, amobarbital [Amytal], aprobarbital [Alurate], butobarbital [Butisol]). The average duration of action of the intermediate-acting barbiturates is 6 to 8 hours.
- Long-acting (eg, phenobarbital, mephobarbital [Mebaral]). The average duration of action of the long-acting barbiturates is 10 to 16 hours.

The Summary Drug Table: Sedatives and Hypnotics: Barbiturates gives examples of the short-, intermediate-, and long-acting barbiturate sedatives and hypnotics.

The miscellaneous sedatives and hypnotics consist of a group of nonrelated drugs and a second group called the benzodiazepines. Examples of the nonrelated group of drugs include ethchlorvynol (Placidyl), zaleplon (Sonata), and zolpidem (Ambien). The benzodiazepines are also called antianxiety drugs (see Chap. 30). Examples of the benzodiazepines include estazolam (ProSom), flurazepam (Dalmane), and quazepam (Doral). The miscellaneous sedatives and hypnotics are listed in the Summary Drug Table: Miscellaneous Sedatives and Hypnotics.

ACTIONS

Barbiturates

All barbiturates have essentially the same mode of action. Depending on the dose given, these drugs are capable of producing central nervous system (CNS) depression and mood alteration ranging from mild excitation to mild sedation, hypnosis (sleep), and deep coma. These drugs also are respiratory depressants; the degree of depression

SUMMARY DRUG TABLE SEDATIVES AND HYPNOTICS: BARBITURATES

GENERIC NAME	TRADE NAME*	USES	ADVERSE REACTIONS	DOSAGE RANGES
amobarbital sodium <i>am-oh-bar'-bi-tal</i>	Amytal Sodium	Sedative, hypnotic, preoperative sedation	Respiratory and central nervous system depression, nausea, vomiting, constipation, diarrhea, bradycardia, hypotension, syncope, hypersensitivity reactions, headache	Sedative: 200 mg 1–2 h before surgery IM; IV: 65–500 mg
aprobarbital <i>a-pro-bar'-bi-tal</i>	Alurate	Sedative, hypnotic	Same as amobarbital sodium	Sedative: 40 mg PO TID
butobarbital <i>byoo-ta-bar'-bi-tal</i>	Butisol sodium, generic	Sedative, hypnotic, preoperative sedation	Same as amobarbital sodium	Sedative: 15–30 mg PO TID, QID; hypnotic: 50–100 mg PO; preoperative sedation: 50–100 mg PO 60–90 min before surgery
mephobarbital <i>me-foe-bar'-bi-tal</i>	Mebaral	Sedative, epilepsy	Same as amobarbital sodium	Sedative: 32–100 mg PO TID, QID; epilepsy: 400–600 mg/d
pentobarbital sodium <i>pen-toe-bar'-bi-tal</i>	Nembutal Sodium, generic	Sedative, hypnotic, preoperative sedation	Same as amobarbital sodium	Sedative: 200 mg TID–QID; hypnotic: 100 mg HS
phenobarbital <i>fee-noe-bar'-bi-tal</i>	Bellatal, Luminal, Solfoton, (parenteral)	Insomnia, seizures, convulsive episodes, preanesthetic	Somnolence, agitation, confusion, ataxia, vertigo, CNS depression, nightmares, nausea, constipation, bradycardia, hypotension, respiratory depression	30–200 mg/d PO; 30–320 mg/d IM or IV
secobarbital sodium <i>see-koe-bar'-bi-tal</i>	generic	Hypnotic, preoperative sedation	Same as amobarbital sodium	Hypnotic: 100 mg HS; sedation: 200–300 mg

*The term *generic* indicates the drug is available in generic form.

usually depends on the dose given. When these drugs are used as hypnotics, their respiratory depressant effect is usually similar to that occurring during sleep.

The sedative or hypnotic effects of the barbiturates diminishes after approximately 2 weeks. Persons taking these drugs for periods longer than 2 weeks may have a tendency to increase the dose to produce the desired effects (eg, sleep, sedation). Physical and psychological dependence may occur, especially after prolonged use of high doses. Discontinuing use of a barbiturate after prolonged use may result in severe, and sometimes fatal, withdrawal symptoms.

Effect of the Barbiturates on Sleep

Sleep occurs in four stages that include varying degrees of wakefulness followed by deeper sleep throughout the sleep cycle. The stages in the sleep cycle fall into two

areas: rapid eye movement (REM) sleep and nonrapid eye movement (NREM) sleep. NREM sleep occurs mostly in the early hours of sleep; REM sleep tends to lengthen progressively during the later hours of sleep.

Dreaming occurs mostly during the REM stage of sleep. Dreams appear to be a necessary part of sleep, and when an individual is deprived of dreaming for a prolonged period, a psychosis can develop. Sleep induced by a barbiturate reduces the amount of time spent in the REM stage (the dreaming stage) of sleep. Abrupt discontinuation of the barbiturates can cause increased dreaming, nightmares, or insomnia.

Miscellaneous Sedatives and Hypnotics

Miscellaneous or nonbarbiturate sedatives and hypnotics have essentially the same mode of action as the barbiturates, that is, they depress the CNS. However,

SUMMARY DRUG TABLE SEDATIVES AND HYPNOTICS: MISCELLANEOUS

GENERIC NAME	TRADE NAME*	USES	ADVERSE REACTIONS	DOSAGE RANGES
chloral hydrate <i>klor-al hye'-drate</i>	Aquachloral, Noctec, <i>generic</i>	Hypnotic, sedative	Disorientation, gastric irritation, nausea, vomiting, delirium, light-headedness, vertigo, hypersensitivity reactions	Sedative: 250 mg PO TID; hypnotic: 500 mg–1 g PO
dexmedetomidine HCL <i>dex-meh-dih-toe'-mih-deen</i>	Precedex	Sedation of intubated and mechanically ventilated patients	Hypotension, nausea, bradycardia, hypoxia, dizziness, headache, apnea, blood pressure fluctuations	0.2–0.7 mcg/kg/h (rate adjusted to achieve the desired level of sedation)
ethchlorvynol <i>eth-klor-vi'-nole</i>	Placidyl	Hypnotic	Vomiting, gastric upset, dizziness, blurred vision, hypotension	500–1000 mg PO
glutethimide <i>gloo-teth'-i-mide</i>	<i>generic</i>	Hypnotic	Drowsiness, skin rash, vertigo, headache, depression	250–500 mg PO
paraldehyde <i>par-al'-de-hyde</i>	Paral, <i>generic</i>	Sedative, hypnotic, delirium tremens	Strong unpleasant breath, GI upset, rash	Sedative: 5–10 mL PO, rectal; hypnotic: 10–30 mL PO, 10–20 mL rectal; delirium tremens: 10–35 mL PO
zaleplon <i>zal'-ah-plahn</i>	Sonata	Insomnia	Dizziness, headache, drowsiness, anxiety, rebound insomnia, nausea, visual impairment, myalgia	10 mg PO HS
zolpidem tartrate <i>zol'-pih-dem</i>	Ambien	Hypnotic	Drowsiness, amnesia, dizziness, nausea, vomiting, diarrhea	10 mg PO
Benzodiazepines				
estazolam <i>es-taz'-e-lam</i>	ProSom	Hypnotic	Headache, heartburn, nausea, palpitations, rash, somnolence, vomiting, weakness, body and joint pain	1–2 mg PO
flurazepam <i>flur-az'-e-pam</i>	Dalmane, <i>generic</i>	Hypnotic	Same as estazolam	15–30 mg PO
quazepam <i>kwa'-ze-pam</i>	Doral	Hypnotic	Same as estazolam	7.5–15 mg PO
temazepam <i>te-maz'-e-pam</i>	Restoril, <i>generic</i>	Hypnotic	Same as estazolam	15–30 mg PO
triazolam <i>trye-ay'-zoe-lam</i>	Halcion, <i>generic</i>	Sedative, hypnotic	Same as estazolam	0.125–0.5 mg PO HS

*The term *generic* indicates the drug is available in generic form.

the miscellaneous sedatives and hypnotics have a lesser effect on the respiratory rate.

Like the barbiturates, the miscellaneous drugs' sedative or hypnotic effects diminish after approximately 2 weeks. Persons taking these drugs for periods longer than 2 weeks may have a tendency to increase the dose to produce the desired effects (eg, sleep, sedation). Physical and psychological dependence may occur, especially after prolonged use of high doses. However, their addictive potential appears to be less than that of the

barbiturates. Discontinuing use of a miscellaneous sedative or hypnotic after prolonged use may result in mild to severe withdrawal symptoms.

USES

According to the National Sleep Foundation, insomnia affects nearly 84 million people. It may be caused by lifestyle changes, such as a new job or moving to a new

town, returning to school, jet lag, pain from arthritis or headaches, stress, or anxiety. The sedatives and hypnotics are primarily used to treat insomnia.

During hospitalization, helping the patient sleep is an important part of the management of illness. Hospitalized patients are in unfamiliar surroundings that are unlike the home situation. There are noises and lights at night, which often interfere with or interrupt sleep. Sleep deprivation may interfere with the healing process; therefore, a hypnotic may be given. These drugs also may be prescribed for short-term use as hypnotics after discharge from the hospital.

Zaleplon, a miscellaneous sedative, is the first prescription sleep preparation that the patient can take, later in the night, if you have at least 4 hours in bed before you become active again. With zaleplon the patient will fall asleep quickly and wake up with little or no aftereffects of the drug.

A hypnotic may be given the night before the operation to prepare the patient for surgery. On the day of surgery, a barbiturate or miscellaneous sedative and hypnotic may be used either alone or with other drugs as part of the preoperative regimen. The anesthesiologist or surgeon selects a drug that is tailored to the patient's needs. When a barbiturate or miscellaneous sedative and hypnotic is used as a hypnotic, a dose larger than that required to produce sedation is given.



Gerontologic Alert

Elderly patients may require a smaller hypnotic dose, and, in some instances, a sedative dose produces sleep.

Although the use of barbiturates and miscellaneous sedatives and hypnotics for sedation has largely been replaced by the antianxiety drugs (see Chap. 30), they occasionally may be used to provide sedation before certain types of procedures, such as cardiac catheterization or the administration of a local or general anesthesia. Sedative doses, usually given during daytime hours, may be used to treat anxiety and apprehension. Patients with chronic disease may require sedation, not only to reduce anxiety, but also as an adjunct in the treatment of their disease.

Paraldehyde, a miscellaneous sedative and hypnotic, may be used to treat delirium tremens and other psychiatric conditions. In addition, some barbiturates are used as anticonvulsants (see Chap. 28).

ADVERSE REACTIONS

Barbiturates

Adverse reactions associated with barbiturate administration include:

- CNS—somnolence, agitation, confusion, CNS depression, ataxia, nightmares, lethargy, residual

sedation (drug hangover), hallucinations, paradoxical excitement

- Respiratory—hypoventilation, apnea, respiratory depression, bronchospasm, laryngospasm
- Gastrointestinal—nausea, vomiting, constipation, diarrhea, epigastric pain
- Cardiovascular—bradycardia, hypotension, syncope
- Hypersensitivity—rash, angioneurotic edema, fever, urticaria
- Other—headache and liver damage.

Miscellaneous Sedatives and Hypnotics

Adverse reactions associated with administration of the miscellaneous sedatives and hypnotics vary depending on the drug used. Common adverse reactions include dizziness, drowsiness, headache, and nausea. Other adverse reactions that may be seen with the administration of miscellaneous sedatives and hypnotics are listed in the Summary Drug Table: Miscellaneous Sedatives and Hypnotics.

CONTRAINDICATIONS

These drugs are contraindicated in patients with known hypersensitivity to the sedatives or hypnotics. The nurse should not administer these drugs to comatose patients, those with severe respiratory problems, those with a history of drug and alcohol abuse, or to pregnant or lactating women. The barbiturates (eg, amobarbital, butabarbital, secobarbital) are classified as Pregnancy Category D drugs. Most miscellaneous sedatives and hypnotics (eg, zolpidem, chloral hydrate, zaleplon) are Pregnancy Category C drugs. Some benzodiazepines (eg, estazolam, quazepam, temazepam, triazolam) are classified as Pregnancy Category X drugs and can cause damage to the developing fetus if administered during pregnancy.



Nursing Alert

Women taking the barbiturates or the benzodiazepines should be warned of the potential risk to the fetus so that contraceptive methods may be instituted, if necessary. A child born to a mother taking benzodiazepines may develop withdrawal symptoms during the postnatal period.

PRECAUTIONS

All drugs entering the body ultimately leave the body. Some leave virtually unchanged, whereas others are transformed into other, less-potent chemicals or compounds **detoxified** (to make nontoxic or not harmful) before they are eliminated. Barbiturates and miscellaneous sedatives and hypnotics are detoxified by the liver

and ultimately excreted by the kidney. These drugs are given with great caution to patients with liver or kidney disease because their diseased organs will not be able to detoxify or eliminate the drug, and a drug build-up will occur. The barbiturates should be administered with extreme caution to patients with a history of drug abuse (eg, alcoholics and opiate abusers) or mental illness. If the drugs are prescribed on an outpatient basis, the amount dispensed is limited to the amount needed until the next appointment. These drugs should be used with great caution during lactation. Drowsiness in infants of breastfeeding mothers who have taken the barbiturates has been reported.

Gerontologic Alert

The nurse uses these drugs cautiously in older adults or in those who are debilitated because these patients are more sensitive to the effects of the sedatives or hypnotics.

INTERACTIONS

The sedatives and hypnotics have an additive effect when administered with alcohol, antidepressants, narcotic analgesics, antihistamines, or phenothiazines.

Nursing Alert

Because narcotic analgesics depress the CNS (see Chap. 19), the nurse should not administer a barbiturate or miscellaneous sedatives and hypnotics approximately 2 hours before or after administration of a narcotic analgesic or other CNS depressant. If the time interval between administration of a narcotic analgesic and a sedative or hypnotic is less than 2 hours, the patient may experience severe respiratory depression, bradycardia, and unresponsiveness.

Health Supplement Alert: Melatonin

Melatonin is a hormone produced by the pineal gland in the brain. The use of melatonin obtained from animal pineal tissue is not recommended because of the risk of contamination. The synthetic form of melatonin does not carry this risk. However, melatonin is an over-the-counter dietary supplement and has not been evaluated for safety, effectiveness, and purity by the FDA. All of the potential risks and benefits may not be known. Supplements should be purchased from a reliable source to minimize the risk of contamination. Melatonin has been used in treating insomnia, overcoming jet lag, improving the effectiveness of the immune system, and as an antioxidant. The most significant use is for the short-term treatment of insomnia at low doses. Individuals wishing to use melatonin should consult with their primary health care provider or a pharmacist before using the supplement. Possible adverse reactions include headache and depression. Drowsiness may occur within 30 minutes after taking the herb. The drowsiness may persist for an hour or

more, affecting any activity that requires mental alertness, such as driving. Although uncommon, allergic reactions to melatonin have been reported. The supplement should be stopped and emergency care sought if symptoms of an allergic reaction (eg, difficulty breathing, hives, or swelling of lips, tongue, or face) occur.

Herbal Alert: Valerian

Valerian was originally used in Europe and was brought on the Mayflower to North America. The herb is widely used for its sedative effects in conditions of mild anxiety or restlessness. It is particularly useful in individuals with insomnia. Valerian improves overall sleep quality by shortening the length of time it takes to go to sleep and decreasing the number of nighttime awakenings. It does not cause the adverse reactions common with sedative drugs, such as addiction and “drug hangovers” the morning after taking the herb. Valerian is classified as generally recognized as safe (GRAS) for use in the United States. Valerian is used as a tea, tablet, capsule, or tincture. When valerian is used as an aid to sleep, the herb is taken approximately 1 hour before bedtime. The dose is less if used for anxiety, and the herb can be used in combination with other calming herbs, such as lemon balm or chamomile. It may take 2 to 4 weeks before the full therapeutic effect (ie, improvement of mood and sleep patterns) of the herb occurs. Dosages include the following:

Tea: 1 to 2 cups/day

Capsules/tablets: 300 to 500 mg daily

Tincture: ½ to 1 teaspoon daily

Standardized extract: 300 to 400 mg daily

NURSING PROCESS

● The Patient Receiving a Sedative or Hypnotic

ASSESSMENT

Assessment of the patient receiving a sedative or hypnotic drug depends on the reason for administration and whether the drug is given routinely or as needed.

Preadministration Assessment

Before administering a barbiturate or miscellaneous sedative and hypnotic, the nurse takes and records the patient's blood pressure, pulse, and respiratory rate. In addition to the vital signs, the nurse assesses the following patient needs.

- Is the patient uncomfortable? If the reason for discomfort is pain, an analgesic, rather than a hypnotic, may be required.
- Is it too early for the patient to receive the drug? Is a later hour preferred?
- Does the patient receive a narcotic analgesic every 4 to 6 hours? A hypnotic may not be necessary because a narcotic analgesic is also capable of causing drowsiness and sleep.

- Are there disturbances in the environment that may keep the patient awake and decrease the effectiveness of the drug?

Barbiturates have little or no analgesic action, so the nurse does not give these drugs if the patient has pain and cannot sleep. Barbiturates, when given in the presence of pain, may cause restlessness, excitement, and delirium.

If the patient is receiving one of these drugs for daytime sedation, the nurse assesses the patient's general mental state and level of consciousness. If the patient appears sedated and difficult to awaken, the nurse withholds the drug and contacts the primary health care provider as soon as possible.

Ongoing Assessment

Before administering the drug each time, the nurse should perform an assessment to include the patient's vital signs (temperature, pulse, respirations, and blood pressure) and level of consciousness (is the patient alert, confused, or lethargic). This is especially important when the drug is ordered to be given as needed. After assessing the patient, the nurse makes a decision regarding administration of the drug.

The nurse checks to see if the drug helped the patient sleep on previous nights. If not, a different drug or dose may be needed, and the nurse should consult the primary health care provider regarding the drug's ineffectiveness.

If the patient has an order for a PRN narcotic analgesic or other CNS depressant and a hypnotic, the nurse should consult the primary health care provider regarding the time interval between administration of these drugs. Usually at least 2 hours should elapse between administration of a hypnotic and any other CNS depressant, but this interval may vary, depending on factors such as the patient's age and diagnosis.

Nursing Alert

The nurse withholds the drug and notifies the primary health care provider if any one or more vital signs significantly varies from the database, if the respiratory rate is 10/min or below, or if the patient appears lethargic. In addition, it is important to determine if there are any factors (eg, noise, lights, pain, discomfort) that would interfere with sleep and whether these may be controlled or eliminated.

NURSING DIAGNOSES

Drug-specific nursing diagnoses are highlighted in the Nursing Diagnoses Checklist. Other nursing diagnoses applicable to these drugs are discussed in depth in Chapter 4.

Nursing Diagnoses Checklist

- ✓ **Risk for Injury** related to sedative or hypnotic effects of drug
- ✓ **Disturbed Sleep Pattern** related to adverse drug effects
- ✓ **Risk for Impaired Gas Exchange** related to respiratory depression

PLANNING

The expected outcomes for the patient depend on the reason for administration of a sedative or hypnotic but may include an optimal response to drug therapy (eg, sedation or sleep), management of adverse drug reactions, an absence of drug dependence, and an understanding of and compliance with the postdischarge drug regimen (when applicable).

IMPLEMENTATION

Promoting an Optimal Response to Therapy

ENHANCING SLEEP PATTERNS. To promote the effects of the sedative or hypnotic the nurse provides supportive care, such as back rubs, night lights or a darkened room, and a quiet atmosphere. The patient is discouraged from drinking beverages containing caffeine, such as coffee, tea, or cola drinks, which can contribute to wakefulness.

The nurse never leaves hypnotics and sedatives at the patient's bedside to be taken at a later hour; hypnotics and sedatives are controlled substances (see Chap. 1). In addition, the nurse never leaves these drugs unattended in the nurses' station, hallway, or other areas to which patients, visitors, or hospital personnel have direct access. If these drugs are prepared in advance, it is important to place them in a locked cupboard until the time of administration.

When giving these drugs orally, the nurse encourages the patient to drink a full glass of water with the drug. When barbiturates are administered intramuscularly, the nurse gives the drug in the gluteus maximus, vastus lateralis, or other areas where there is little risk of encountering a nerve trunk or major artery. Injection near or into peripheral nerves results in permanent nerve damage. When giving oral paraldehyde, the nurse mixes the drug with cold orange or tomato juice to eliminate some of the pungent taste. When paraldehyde is ordered for rectal administration, the nurse dissolves the dose of the drug (usually 10–20 mL) in one to two parts of oil or isotonic sodium chloride and gives it as a retention enema.

PREVENTING INJURY. After administration of a hypnotic, the nurse raises the side rails and advises the patient to remain in bed and to call for assistance if it is necessary to get out of bed. Patients receiving sedative doses may or may not require this safety measure, depending on the patient's response to the drug. The nurse assesses the

patient receiving a sedative dose and determines what safety measures must be taken. The nurse assesses the patient receiving a hypnotic 1 to 2 hours after the drug is given to evaluate the effect of the drug.

Monitoring and Managing Adverse Drug Reactions

It is important that the nurse observes the patient for adverse drug reactions. During periods when the patient is excited or confused, the nurse protects the patient from harm and provides supportive care and a safe environment. The nurse notifies the primary health care provider if the patient fails to sleep, awakens one or more times during the night, or develops an adverse drug reaction. In some instances, supplemental doses of a hypnotic may be ordered if the patient awakens during the night.

Excessive drowsiness and headache the morning after a hypnotic has been given (drug hangover) may occur in some patients. The nurse reports this problem to the primary health care provider because a smaller dose or a different drug may be necessary. The nurse assists the patient with ambulation, if necessary. When getting out of bed the patient is encouraged to rise to a sitting position first, wait a few minutes, then rise to a standing position.



Gerontologic Alert

The older adult is at greater risk for oversedation, dizziness, confusion, or ataxia (unsteady gait) when taking a sedative or hypnotic. The nurse checks elderly and debilitated patients for marked excitement, CNS depression, and confusion. If excitement or confusion occurs, the nurse observes the patient at frequent intervals (as often as every 5–10 minutes may be necessary) for the duration of this occurrence and institutes safety measures to prevent injury. If oversedation, extreme dizziness, or ataxia occurs, the nurse notifies the primary health care provider.

MONITORING AND MANAGING RESPIRATORY DEPRESSION. These drugs depress the CNS and can cause respiratory depression. The nurse carefully assesses respiratory function (rate, depth, and quality) before administering a sedative, $\frac{1}{2}$ to 1 hour after administering the drug, and frequently thereafter. Toxic reaction of the barbiturates can cause severe respiratory depression, hypoventilation, and circulatory collapse.



Nursing Alert

The onset of symptoms of barbiturate toxicity may not occur until several hours after the drug is administered. Symptoms of acute toxicity include CNS and respiratory depression, constriction or paralytic dilation of the pupils, tachycardia, hypotension, lowered body temperature, oliguria, circulatory collapse, and coma. The nurse should report any symptoms of toxicity to the primary health care provider immediately.

Treatment of barbiturate toxicity is mainly supportive (ie, maintaining a patent airway, oxygen administration, monitoring vital signs and fluid balance). The patient may require treatment for shock, respiratory assistance, administration of activated charcoal, and in severe cases of toxicity, hemodialysis.

MANAGING DRUG DEPENDENCY. Sedatives and hypnotics are best given for no more than 2 weeks and preferably for a shorter time. However, a barbiturate or miscellaneous sedative and hypnotic can cause drug dependency. The nurse must never suddenly discontinue use of these drugs when there is a question of possible dependency. Patients who have been taking a sedative or hypnotic for several weeks should be gradually withdrawn from the drug to prevent withdrawal symptoms. Symptoms of withdrawal include restlessness, excitement, euphoria, and confusion. Withdrawal can result in serious consequences, especially in those with existing diseases or disorders.

Educating the Patient and Family

In educating the patient and family about barbiturates and miscellaneous sedatives and hypnotics, several general points must be considered, as well as teaching about two common abuses of these drugs.

The nurse gives the patient and family an explanation of the prescribed drug and dosage regimen, as well as situations that should be avoided. The nurse develops a teaching plan to include one or more of the following items of information:

GENERAL TEACHING POINTS

- Do not drink any alcoholic beverage 2 hours before, with, or 8 hours after taking the drug.
- If the drug appears to be ineffective, contact the primary health care provider. Do not increase the dose unless advised to do so by the primary health care provider.
- Notify the primary health care provider if any adverse drug reactions occur.
- The primary health care provider usually prescribes these drugs for short-term use only.
- When taking the drug as a sedative, be aware that the drug can impair the mental and physical abilities required for performing potentially dangerous tasks, such as driving a car or operating machinery.
- Observe caution when getting out of bed at night after taking a drug for sleep. Keep the room dimly lit and remove any obstacles that may result in injury when getting out of bed. Never attempt to drive or perform any hazardous task after taking a drug intended to produce sleep.
- Do not use these drugs if you are pregnant, considering becoming pregnant, or breastfeeding.

- Do not use over-the-counter (OTC) cold, cough, or allergy drugs while taking this drug unless their use has been approved by the primary health care provider. Some of these products contain antihistamines or other drugs that also may cause mild to extreme drowsiness. Others may contain an adrenergic drug, which is a mild stimulant, and therefore will defeat the purpose of the drug.

ZALEPLON

- Zaleplon may be taken at bedtime or later in the night if the you have at least 4 hours of bedtime left. You will still wake up naturally without excessive drowsiness in the morning.
- Zaleplon should not be given with a high fat meal or snack because fat interferes with absorption of the drug.

TEACHING ABOUT ABUSE. Sedatives and hypnotics are subject to abuse when taken on an outpatient basis. The most common abuses are increasing the dose of the drug and drinking an alcohol beverage shortly before, with, or shortly after taking the sedative or hypnotic. The nurse emphasizes the importance of not increasing the dosage of the drug and the dangers of consuming alcohol while taking a sedative or hypnotic.

Increasing the Dosage. Sedatives and hypnotics can become less effective after they are taken for a period of time. Thus, there may be a tendency to increase the dose without consulting the primary health care provider. To ensure compliance with the treatment regimen, the nurse emphasizes the importance of not increasing or decreasing the dose unless a change in dosage is recommended by the primary health care provider. In addition, the nurse stresses the importance of not repeating the dose during the night if sleep is interrupted or sleep only lasts a few hours unless the primary health care provider has approved taking the drug more than once per night.

Use With Alcohol. Alcohol is a CNS depressant, as are the sedatives and hypnotics. When alcohol and a sedative or hypnotic are taken together, there is an additive effect and an increase in CNS depression, which has, on occasion, resulted in death. The nurse must emphasize the importance of not drinking alcohol while taking this drug and stress that the use of alcohol and any one of these drugs can result in serious effects.

EVALUATION

- The therapeutic effect is achieved and the sleep pattern improved.
 - Adverse drug reactions are identified, reported to the primary health care provider, and managed successfully through appropriate nursing interventions.
- The patient is free of drug dependence.
 - The patient and family demonstrate an understanding of the drug regimen.
 - The patient verbalizes the importance of complying with the prescribed therapeutic regimen.
 - The patient verbalizes an understanding of what to avoid while taking the drug.

● Critical Thinking Exercises

1. *Ms. Parker's husband was killed in an automobile accident, and she has had trouble coping with her loss. She complains of being unable to sleep for more than an hour before she wakes. The primary health care provider prescribes a hypnotic, one capsule per night for use during the next 3 weeks. In 2 weeks, she calls the primary health care provider's office and asks for a refill of her prescription. Determine what questions you would you ask Ms. Parker. Explain why you would ask them.*
2. *Mr. Davidson, who is 67 years old, is to be discharged after major bowel surgery. The primary health care provider gives him a prescription for 24 tablets of zolpidem (Ambien). When reading Mr. Davidson's chart you note that he works part time on weekends as a bartender. Discuss what you would emphasize when explaining the prescription to Mr. Davidson.*
3. *Mr. Allen, who is hospitalized in the coronary care unit with a myocardial infarction, is restless and tells you that although he has been able to sleep other nights while in the hospital, he is unable to sleep tonight. Although he has an order for flurazepam (Dalmane) 30 mg HS, analyze what you would investigate before making a decision regarding administration of the hypnotic.*
4. *Discuss and give a rationale for situations or conditions in which sedatives would be contraindicated.*
5. *Explain why sedatives or hypnotics must be given cautiously in older adults.*

● Review Questions

1. Ms. Brown has arthritis in her lower back, and the pain keeps her awake at night. She asks if she can have a "sleeping pill." In considering her request the nurse must take into account that _____.
 - A. barbiturates, if given in the presence of pain, may cause excitement or delirium
 - B. a hypnotic may be given instead of an analgesic to relieve her pain
 - C. hypnotics often increase the pain threshold
 - D. a hypnotic plus an analgesic is best given in this situation

2. Which of these drugs can be given at bedtime or later during the night if the patient is unable to sleep and has at least 4 hours left to sleep?
 - A. temazepam
 - B. estazolam
 - C. zaleplon
 - D. zolpidem
3. When giving a hypnotic to Ms. Green, age 82 years, the nurse is aware that _____.
 - A. smaller doses of the drug are usually given to older patients
 - B. elderly patients usually require larger doses of a hypnotic
 - C. older adults excrete the drug faster than younger adults
 - D. dosages of the hypnotic may be increased each night until the desired effect is achieved
4. Which of the following points should be included in a teaching plan for a patient taking a sedative or hypnotic?
 - A. An alcoholic beverage may be served 1 to 2 hours before a sedative is taken without any ill effects.
 - B. Dosage of the sedative may be increased if sleep is not restful.
 - C. These drugs may safely be used for 6 months to 1 year when given for insomnia.
 - D. Do not use any over-the-counter cold, cough, or allergy medications while taking a sedative or hypnotic.
5. Which of the following sedatives/hypnotics is a Pregnancy Category X drug?
 - A. zolpidem
 - B. amobarbital
 - C. temazepam
 - D. chloral hydrate

● Medication Dosage Problems

1. Triazolam (Halcion) 0.125 mg is prescribed. The drug is available in 0.25-mg tablets. The nurse administers _____.
2. Chloral hydrate (Noctec) 500 mg is prescribed for insomnia. The drug is available in 250-mg tablets. The nurse administers _____.