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Lead Poisoning

Patient name: _____ Admission: _____

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- I. **The client/caregiver can define lead poisoning.**
 - A. Lead poisoning is the result of exposure to lead in the environment.
 - B. Children are more susceptible to the negative effects of lead.
 - C. Lead can accumulate and damage the nervous system. This may result in lower intelligence and problems with school.
 - D. Most exposure to lead is from lead pipes and lead-based paint in older homes.

- II. **The client/caregiver can list signs and symptoms of lead poisoning.**
 - A. Lead poisoning is a gradual build up and symptoms may not appear until levels reach a dangerous level.
 - B. Symptoms in children may be
 - Irritability
 - Loss of appetite
 - Weight loss
 - Abdominal pain
 - Vomiting
 - Constipation
 - Sluggishness
 - Paleness
 - Learning difficulties
 - C. Symptoms for adults include these plus
 - Pain, numbness, or tingling of the extremities
 - Muscular weakness
 - Headache
 - Memory loss
 - Mood disorders
 - Reduced sperm count

- III. **The client/caregiver can list causes or sources of lead poisoning.**
 - A. High levels of lead are in soil as a result of gasoline or paint with lead being disposed of improperly.
 - B. Prior to 1980, lead pipes, copper pipes, brass plumbing, and solder were used and could allow lead to release into tap water.

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- Now these products are restricted. The Environmental Protection Act recommends not making baby formula with tap water from old plumbing systems.
- C. In 1978, lead-based paints used in homes, children's toys, and furniture were banned. Lead-based paint may still remain on walls and woodwork in older homes.
 - D. Dust can contain lead from chipped paint or soil from outside.
 - E. Imported canned foods may still have been sealed by lead solder.
 - F. Read labels to avoid lead in cosmetics or complementary remedies.
- IV. **The client/caregiver can list possible complications from lead poisoning.**
 - A. Complications for children include
 - Nervous system and kidney damage
 - Learning disabilities
 - Speech, language, and behavior problems
 - Poor muscle coordination
 - Decreased muscle and bone growth
 - Hearing damage
 - Seizures
 - B. Complications for adults include
 - High blood pressure
 - Digestive or nerve disorders
 - Cataracts
 - Memory and concentration problems
 - Muscle and joint problems
 - Pregnancy complications (miscarriage, preterm delivery, and still birth)
 - Damage to sperm production

 - V. **The client/caregiver can list measures to prevent lead poisoning.**
 - A. Have a professional check your home for lead.
 - B. Wash children's hands after they play outside and before eating and going to bed.
 - C. Clean floors with wet mop, and wipe furniture, windowsills, and dusty surfaces.

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- D. Restrict where your children play.
- E. Make sure child's diet is high in iron and calcium (reduces lead absorption).
- F. Run cold water for over a minute before using.
- G. Fix surfaces with peeling or chipping paint.
- H. If doing remodeling or work in an older house
 - 1. Wear protective equipment and clothing.
 - 2. Do not eat or drink in area where lead dust is present.
 - 3. Do not remove lead paint by sanding.
 - 4. Do not use open-flame torch or heat guns to remove paint.

U.S. Environmental Protection Agency: Lead in Paint, Dust, and Soil
www.epa.gov/opptintr/lead/index.html

RESOURCES

Centers for Disease Control and Prevention: Lead Paint Prevention Program
www.cdc.gov/nceh/lead/

Consumer Product Safety Commission: Protect Your Family from Lead in Your Home
www.cpsc.gov/cpscpub/pubs/426.html

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