BASF Chemical Emergency Medical Guidelines

Aniline ($C_6H_5NH_2$) D 1

Information and recommendations for patients

- **Patients whose clothing or skin is contaminated with aniline can secondarily contaminate rescue and medical personnel by direct contact or through evaporation of aniline.**
- **Aniline is rapidly absorbed after inhalation and ingestion as well as through intact skin.**
- **Aniline can induce changes in the red blood cells or cause their destruction, which impairs the delivery of oxygen to tissues. Depression of the central nervous system and cardiovascular collapse may result.**
- **Immediate treatment for aniline overexposure consists of cardiorespiratory support and intravenous administration of the antidote toluidine blue or methylene blue.**

Substance information

Aniline ($C_6H_5NH_2$), CAS 62-53-3
Synonyms: aminobenzene, aminophen, benzenamine, phenylamine.
At room temperature, aniline has a low vapor pressure and is a clear to slightly yellow, oily liquid that darkens to brown color on exposure to air. Aniline has an aromatic or fishy odor.
Aniline is synthesized by catalytic hydrogenation of nitrobenzene or by ammonolysis of phenol. It is used in the synthesis of a variety of products including polyurethane foam, photographic developers, rubber, dyes, and crop protection products.

What immediate health effects can result from exposure to aniline?

Aniline can cause effects when breathed or swallowed and can also pass rapidly through the skin. It induces changes in the red blood cells and can cause their destruction; hence, the blood turns brown and tissues are unable to get enough oxygen. Headaches, weakness, drowsiness, and shortness of breath can occur. The skin, lips and nailbeds often turn blue or gray. A serious exposure may be acutely life-threatening.
Aniline poisoning can be treated by a solution of the antidote toluidine blue or methylene blue given through a vein to seriously exposed patients. After administration of the antidote the patient's urine may temporarily become blue-green.

Are any future health effects likely to occur?

A single small exposure from which a person recovers quickly is not likely to cause delayed or long-term effects. Persons who have had serious exposures may get permanent damage to brain, heart, kidneys, or liver.

Follow-up instructions

Keep this page and take it with you to your next appointment. Follow only the instructions checked below.

( ) Call your doctor or the Emergency Department if you develop any unusual signs or symptoms within the next 5 days, especially:
- difficulty breathing or shortness of breath
- chest pain or tightness
- irregular heart rhythm
- stomach pain or vomiting
- blood in the urine (brown- or bronze-colored urine)
- blue, brown, or gray color of the skin, lips, or nailbeds

( ) No follow-up appointment is necessary unless you develop any of the symptoms listed above.

( ) Call for an appointment with Dr. _____ in the practice of _____ When you call for your appointment, please say that you were treated in the Emergency Department at _____ Hospital by _____ and were advised to be seen again in _____ days.

( ) Return to the Emergency Department/_____ Clinic on (date) _____ at _____ am/pm for a follow-up examination.

( ) Do not perform vigorous physical activities for 1 to 2 days.

( ) You may resume everyday activities including driving and operating machinery.

( ) Do not return to work for _____ days.

( ) You may return to work on a limited basis. See instructions below.

( ) Avoid exposure to cigarette smoke for 72 hours; smoke may worsen the condition of your lungs.

( ) Avoid drinking alcoholic beverages for 72 hours; alcohol may worsen your clinical condition.

( ) Avoid taking the following medications: _____
_____

( ) You may continue taking the following medication(s) that your doctor(s) prescribed for you: _____
_____

( ) Other instructions: _____
_____

Signature of patient _____ Date _____
Signature of physician _____ Date _____

References

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