EMERGENCY NURSING

MANAGEMENT OF CARDIAC ARREST

Cardiac **arrest** is a sudden loss of blood flow resulting from the failure of the heart to pump effectively. Signs include loss of consciousness and abnormal or absent breathing. Some individuals may experience chest pain, shortness of breath, or nausea before **cardiac arrest**.Sudden cardiac arrest requires immediate action for survival.

**At the emergency room**

The nurses work to stabilize your condition and treat a possible heart attack, heart failure or electrolyte imbalances. Medications are given to stabilize your heart rhythm.

**CPR**

Immediate CPR is crucial for treating sudden cardiac arrest. By maintaining a flow of oxygen-rich blood to the body's vital organs, CPR can provide a vital link until more-advanced emergency care is available. I CPR is done if patient collapses unconscious. Then, if the person isn't breathing normally, begin pushing hard and fast on the person's chest — at a rate of 100 to 120 compressions a minute, allowing the chest to fully rise between compressions. This will be done until an automated external defibrillator (AED) becomes available or emergency personnel arrive.

**Defibrillation**

Advanced care for ventricular fibrillation, a type of arrhythmia that can cause sudden cardiac arrest, generally includes delivery of an electrical shock through the chest wall to the heart. The procedure, called defibrillation, momentarily stops the heart and the chaotic rhythm. This often allows the normal heart rhythm to resume.

Defibrillators are programmed to recognize ventricular fibrillation and send a shock only when it's appropriate. These portable defibrillators are increasingly available in public places, including airports, shopping malls, casinos, health clubs, and community and senior citizen centers.

**Long-term treatment**

After you recover, your doctor and nurses will discuss preventive treatment options with you to reduce your risk of another cardiac arrest like:

* **Drugs.** Doctors use various anti-arrhythmic drugs,beta blockers
* **Implantable cardioverter-defibrillator (ICD).**This constantly monitors your heart rhythm.
* **Coronary angioplasty.** This procedure opens blocked coronary arteries.
* **Coronary bypass surgery.** This can improve the blood supply to your heart.
* **Radiofrequency catheter ablation.** Can be used to block a single abnormal electrical pathway.
* **Corrective heart surgery.**

MANAGEMENT OF CARBON MONOXIDE POISONING

Carbon monoxide is a colorless, odorless, tasteless, nonirritating gas and an old enemy to human health. Carbon monoxide poisoning is a rare illness, and emergency nurses need to be aware of this illness and how to diagnose and treat it, as it is one of the most infamous poisons that silently takes many lives.

Emergency management of carbon monoxide poisoning involves:

* Move the person away from [carbon monoxide](https://www.webmd.com/webmd/consumer_assets/controlled_content/healthwise/medicaltest/carbon_monoxide_co_medicaltest_hw3942.xml) area.
* If the person is unconscious, check for injuries before moving.
* Turn off carbon monoxide source if you can do so safely.
* Promply remove the patient from continued exposure and immediately institute oxygen therapy with a nonrebreather mask.
* **Begin CPR, if Necessary**
* If the person is unresponsive, not breathing, or not breathing normally. Continue CPR until the person begins breathing or emergency help arrive
* **Breathing pure oxygen.** In the emergency room, pure oxygen through a mask placed over your nose and mouth to help patient to breathe. This helps oxygen reach your organs and tissues. If patient can't breathe on his/her own, a machine (ventilator) may do the breathing for you.
* **Spending time in a pressurized oxygen chamber.** In many cases, hyperbaric oxygen therapy is recommended. This therapy involves breathing pure oxygen in a chamber in which the air pressure is about two to three times higher than normal. This speeds the replacement of carbon monoxide with oxygen in your blood.
* **Hyperbaric oxygen therapy.** This may be used in cases of severe carbon monoxide poisoning. It helps protect heart and brain tissue, which are particularly vulnerable to injury from carbon monoxide poisoning. Hyperbaric oxygen therapy may also be recommended for pregnant women because unborn babies are more susceptible to damage from carbon monoxide poisoning. Consider hyperbaric oxygen therapy (HBO) therapy when the patient has a COHgb level of more than 25- 30%, there is evidence of cardiac involvement, severe acidosis, transient or prolonged unconsciousness, neurological impairment, abnormal neuropsychiatric testing, or the patient is ≥36 years in age. HBO is also administered at lower COHgb(<25%) levels if suggested by clinical condition and/history of exposure.
* Severe carbon monoxide poisoning may require placing the person in a full body, high pressure chamber to help force oxygen into the body.
* Hyperbaric oxygen is the treatment of choice for pregnant women, even if they are less severely poisoned. Hyperbaric oxygen is safe to administer and international consensus favors it as part of a more aggressive role in treating pregnant women.

MANAGEMENT OF EPITAXIS

Initial management includes compression of the nostrils (application of direct pressure to the septal area) and plugging of the affected nostril with gauze or cotton that has been soaked in a topical decongestant. Direct pressure should be applied continuously for at least five minutes, and for up to 20 minutes. Tilting the head forward prevents blood from pooling in the posterior pharynx, thereby avoiding nausea and airway obstruction. Hemodynamic stability and airway patency should be confirmed. Fluid resuscitation should be initiated if volume depletion is suspected. Every attempt should be made to locate the source of bleeding that does not respond to simple compression and nasal plugging. The examination should be performed in a well-lighted room, with the patient seated and clothing protected by a sheet or gown. The physician should wear gloves and other appropriate protective equipment (e.g., surgical mask, safety glasses). A headlamp or head mirror and a nasal speculum should be used for optimal visualization. An epistaxis tray can be created using common supplies and a few specialized instruments . Clots and foreign bodies in the anterior nasal cavity can be removed with a small (Frazier) suction tip, irrigation, forceps, and cotton-tipped applicators. Typical contents of an epistaxis tray. Top row: nasal decongestant sprays and local anesthetic, silver nitrate cautery sticks, bayonet forceps, nasal speculum, Frazier suction tip, posterior double balloon system and syringe for balloon inflation. Bottom row: Packing materials, including nonadherent gauze impregnated with petroleum jelly and 3 percent bismuth tribromophenate (Xeroform), Merocel, Gelfoam, and suction cautery. Diffuse oozing, multiple bleeding sites, or recurrent bleeding may indicate a systemic process such as hypertension, anticoagulation, or coagulopathy. In such cases, a hematologic evaluation should be performed.

**ANTERIOR EPISTAXIS**

If a single anterior bleeding site is found, vasoconstriction should be attempted with topical application of a 4 percent cocaine solution or an oxymetazoline or phenylephrine solution. For bleeding that is likely to require more aggressive treatment, a local anesthetic, such as a 4 percent cocaine solution or tetracaine or lidocaine (Xylocaine) solution, should be used. Adequate anesthesia should be obtained before treatment proceeds. Larger vessels generally respond more readily to electrocautery. Complications of nasal packing procedures include septal hematomas and abscesses from traumatic packing, sinusitis, neurogenic syncope during packing, and pressure necrosis secondary to excessively tight packing.

**POSTERIOR EPISTAXIS**

Posterior packing may be accomplished by passing a catheter through one nostril (or both nostrils), through the nasopharynx, and out the mouth . A gauze pack then is secured to the end of the catheter and positioned in the posterior nasopharynx by pulling back on the catheter until the pack is seated in the posterior choana, sealing the posterior nasal passage and applying pressure to the site of the posterior bleeding

**PERSISTENT BLEEDING**

Hot water irrigation has shown promise in reducing discomfort and length of hospitalization in patients with posterior epistaxis. More invasive alternatives include arterial ligation and angiographic arterial embolization.

MANAGEMENT OF FOREIGN OBJECT IN EYE

A foreign object in the eye is something that enters the eye from outside the body. It can be anything that does not naturally belong there, from a particle of dust to a metal shard. When a foreign object enters the eye, it will most likely affect the cornea or the conjunctiva.

Ensure patient:

* Restrict eye movement.
* Does not rub or put pressure on the eye.
* Does not use any utensils or implements, such as tweezers or cotton swabs, on the surface of the eye.
* Does not remove contact lenses unless there is sudden swelling or you have suffered a chemical injury.

I, AS A NURSE SHOULD ENSURE TO DO THE FOLLOWING:

* An anesthetic drop will be used to numb the eye’s surface.
* [Fluorescein dye­](https://www.healthline.com/health/fluorescein-eye-stain), which glows under special light, will be applied to the eye via an eye drop. The dye reveals surface objects and abrasions.
* To use a magnifier to locate and remove any foreign objects
* The objects may be removed with a moist cotton swab or flushed out with water.
* If the initial techniques are unsuccessful at removing the object, your physician may use needles or other instruments.
* If the foreign object has caused corneal abrasions, I give an antibiotic ointment to prevent infection.
* For larger corneal abrasions, eye drops containing cyclopentolate or homatropine may be administered to keep the pupil dilated. Painful muscle spasms could occur if the pupil constricts before the cornea heals.
* You will be given acetaminophen to treat pain from larger corneal abrasions.
* A [CT scan](https://www.healthline.com/health/ct-scan) or another imaging study may be required for further investigation of an intraocular object.

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