ABSTRACT

EMERGENCY CONDITIONS IN DENTAL PRACTICE

Semenov Kostiantyn Arnoldovych
Candidate of Medical Sciences, associate professor of the Department of Dentistry of the Faculty of Postgraduate Education
Dnipro State Medical University, Ukraine

Asphyxia – acute respiratory failure

Dislocation
Obturation
Stenotic Valve
Aspiration

- Cricotomy is an incision of the larynx by exposing and dissecting the cricoid cartilage.
- Cricotracheostomy is an exposure and dissection of the cricoid cartilage and upper tracheal rings.
- Cricothyrotomy is an incision of the larynx in the gap between the cricoid and thyroid cartilages.
- Conicocentesis is a puncture by thick needles (3-4 pcs), part of the larynx in the space between the cricoid and thyroid cartilages.
- Tracheocentesis is a puncture of the trachea by thick needles.
- Tracheotomy is a surgery in which the trachea is opened and a special tube is inserted into its lumen. There are upper and lower tracheotomies. The upper one is performed above the isthmus of the thyroid gland. The lower one – under the isthmus of the thyroid gland.
- Heimlich maneuver.

Bleeding

Bleeding can be primary and secondary.

- Primary bleeding occurs immediately after the vessel is damaged.
- Secondary bleeding can be early, late, and recurrent.
- Early secondary bleeding occurs 1-3 days after the injury due to the pushing of the blood clot out of the damaged vessel as a result of increased blood pressure.
- Late secondary bleeding occurs 5-6 days after the injury and later, and is due to purulent fusion of the blood clot or the wall of the traumatic aneurysm that is formed.
- Secondary recurrent bleeding occurs repeatedly and is observed in purulent and necrotic processes.
- Pressure bandage.
Profuse bleeding – finger pressing on the vessel supplying the blood to given anatomical area.

Facial artery is pressed slightly forward from the point of intersection of the anterior edge of the masseter muscle with the lower edge of the lower jaw.

Superficial temporal artery is pressed 1 cm forward and upward, stepping back from tragus of the ear.

Common carotid artery is pressed with a finger to the transverse process of the sixth cervical vertebra.

Point of intersection of the sternocleidomastoid muscle and horizontal line drawn at the level of the upper edge of the thyroid cartilage.

**Hypertensive crisis**

Sudden increase in blood pressure with neurovascular and humoral disorders.

Clinical manifestations: headache, dizziness, nausea, vomiting, feeling of heaviness in the chest.

_There are two categories of hypertensive crisis:_

**Urgency**

**Emergency hypertensive crisis if**

Tachycardia: Anaprilin 20-40 mg sublingually or Metoprolol 25-50 mg sublingually

Normocardia or bradycardia: Nifedipine 3-6 drops sublingually

Patient's medications

**Emergency hypertensive crisis – neurological symptoms**

Intravenous:

- Furosemide 1% – 2-4 ml
- Magnesium sulfate 25% –10 ml

*Alternative:*

- Intravenous: Eufiline 2% – 5-10 ml
- In case of residual effects (headache):
  - Analgin 2.0 ml + Dibazol 3-5 ml intramuscularly

**Bronchial asthma – shortness of breath, cough, tachycardia**

Bronchodilator aerosol (Astmopent, Berotec)

Subcutaneously:

- 0.3 ml of adrenaline solution 0.1%, or
- 0.3 ml of ephedrine solution 5%.

**Fainting – short-term loss of consciousness due to acute vascular insufficiency**

Trendelenburg position

ammonia solution 10% – inhale vapors

Massage of Zhen Zhong active point.

If unconsciousness lasts longer than 60 seconds.

Subcutaneously: solution of caffeine 10% – sodium benzonate 1 ml.

**Collapse – acutely developing vascular insufficiency, which is manifested by a sharp decrease in blood pressure, consciousness is preserved**

Clinical manifestations: skin paleness, weak pulse, arrhythmia, shallow breathing, consciousness is preserved.
**Trendelenburg position**

**Subcutaneously:** Adrenaline 0.1% – 0.5 ml

**Intravenous:**
- Adrenaline 0.1% – 0.5 ml + 50 ml of saline
- Dexamethasone 1 ml + 20 ml of saline

**Anaphylactic shock**

An immediate allergic reaction accompanied by life-threatening clinical manifestations: sharp drop in blood pressure, impaired central and peripheral nervous system functioning, endocrine disorders, and respiratory failure.

*Treatment measures of any origin are based on the underlying mechanisms of pathogenesis*

**Subcutaneously:** Adrenaline 0.1% – 0.5 ml

**Intramuscularly:** Dexamethasone 1 ml, Suprastin 2% – 2 ml

**Intravenously:**
- Connection of the system with saline
  - Adrenaline 0.1% – 1.0 ml + 500 ml of saline
  - Dexamethasone 1 ml
  - Cordiamine 1 ml
  - Corglucose 0.06% – 0.5 ml
  - Furosemide 1% – 2 ml
  - Eufiline 2.0% – 5 ml

**Comas of unknown etiology**

Ensuring airway management.

**Intravenously:**
- Strophanthin 0.05% – 0.5 ml
- Dopamine 4% – 5 ml (by drop infusion)

**Management of cerebral edema:**
- Dexamethasone 0.4% – 8 mg *IV*
- Sodium oxybate 20% – 10 ml *IV*
- Furosemide 1% – 2 ml *IM*

**In case of seizures:**
- Sibazone 0.5% – 2 ml *IM*, maximum dosage, fractionally up to 6 ml.

**Artificial lung ventilation:**

Ratio of the number of compressions to ventilation breaths is 30:2.

**References:**


