

Esophageal injuries

Esophageal injuries occur most often per vias naturales from the **lumina**, but also as **part of neck tissue injuries**

According to the **mechanism**, we divide esophagus injuries into:

- *chemical (etch)*
- *thermal (scalding)*
- *mechanical*

According to the **degree of damage**, we divide esophageal injuries into:

- *penetrating*
- *non-penetrating*

Esophageal cauterization

- = **oesophagitis corrosiva**
- they most often occur in *households* by ingesting cleaning, hygiene or disinfectant products
- often in children and adults, as a result of **confusion** or **suicidal intent**
- the extent of damage depends on the amount and concentration of the ingested substance
- **types:**
 - **after ingestion of acid** – formation of *coagulation necrosis*
 - **after ingestion of lye** – colliculating necrosis, more poorly defined
- **symptoms:**
 - severe shocking **pain** occurs immediately after ingestion
 - development of **dysphagia and odynophagia**
 - with swelling of the aditus laryngis – **suffocation and stridor**
- there is a risk of **mediastinitis** in case of perforation of the esophagus - suspicion of perforation of the esophagus is appropriate if there is a sudden rise in [Fever (pediatrics)] [temperature]] , shivering, pain between the shoulder blades or under the sternum, or if subcutaneous emphysema develops on the neck
- substances can also have an overall effect in the sense of **alkalosis or acidosis** (alkalosis is rarer, the alkali is usually neutralized by HCl in the stomach)
- **examination:**
 - we notice signs of *cauterization* in the throat and in the oral cavity
 - an **X-ray** of the act of swallowing and a **rigid esophagoscopy** are commonly performed
 - we introduce a *nasogastric tube* during perforation
- **First aid:**
 - **dilution** of the harmful substance - rinsing the mouth, drinking water or milk (do not drink lye after swallowing acid!)
 - **do not induce vomiting**, further damage to the esophagus would occur
 - **anti-shock measures** and **transport** to the ENT department
 - there is a risk of *stenoses* - we administer **corticoids** (the effect on stenoses has not been directly confirmed)
 - **pain relief** and coverage with broad-spectrum antibiotics
 - *mediastinitis*: external **surgical revision**
 - indoor environment monitoring



X-ray passage through the esophagus using a barium contrast suspension.

Scalding

- most often in **children**
- damage usually does not reach the extent of etch damage
- **symptoms:**
 - **dysphagia, odynophagia**
 - **swelling** of the laryngeal entrance (inspiratory dyspnea, stridor)
 - there is **hyperemia** and **swelling** of the mucous membrane in the pharynx (rarely even necrosis)
- **first aid:**
 - ingestion of **cold** liquids or sucking on ice cubes
 - **analgetics, ATB**, rarely corticoids

Mechanical injury, foreign bodies

Mechanical injuries

- most often when **accidentally falling** with open mouth on foreign bodies (toothbrush, cutlery, branch, etc.), or **iatrogenically** during endoscopy or swallowing sharp objects

Foreign bodies

- they are common in the swallowing tract
- **in children** – toy parts, buttons
- **in adults** – seeds, bones
- **in the elderly** – dental prostheses
- **in psychiatric patients** – often various artificially created bodies modified to make extraction difficult (so-called *anchors*)
- **symptoms:**
 - *mechanical damage:* **bleeding, dysphagia, odynophagia, swelling**
 - *in case of perforation:* **emphysema**, parapharyngeal or retropharyngeal **abscess** or **mediastinitis**
 - in the case of a foreign body, it depends on its location and current injury
 - **as a rule , dysphagia or aphagia** occurs
 - *small foreign bodies* (fish bones) often get stuck already in the pharynx – in the tonsils, at the base of the tongue, etc.
 - *larger bodies* are most often stuck in the upper esophageal opening (they are not visible during a laryngoscopy examination - we only find saliva stagnation in the piriform recesses)
- **diagnosis:**
 - **x-ray** : either the body is directly contrasted or we examine the passage through the esophagus

if the fluid flows freely across and around the body, let the patient swallow a cotton swab soaked in **contrast** → the contrast material must be absorbable from the mediastinum (not barium).

- **therapy:**
 - *minor mechanical injuries - conservative therapy:*
 - **we disinfect** locally, or administer ATB
 - we prescribe **corticoids** for laryngeal edema , and **analgesics** for pain
 - *for larger lacerations*, we perform a **suture**
 - foreign bodies in the oropharynx are directly removed under **local anesthesia**
 - *in the hypopharynx* using direct laryngoscopy
 - *in the esophagus* using rigid esophagoscopy under general anesthesia
 - we perform the removal **as soon as possible** so that pressure necrosis does not occur

Links

Related Articles

- esophagus
- Bleeding from the alimentary canal
- Tumors of the esophagus
- Esophageal disease

Source

- BENEŠ, Jiří. *Studijní materiály* [online]. ©2007. [cit. 2009]. <http://jirben2.chytrak.cz/materialy/orl_jb.doc>.

References

- KLOZAR, Jan, et al. *Speciální otorinolaryngologie*. 1. edition. Galén, 2005. 224 pp. ISBN 80-7262-346-X.