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First aid - hanging

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Learning objectives

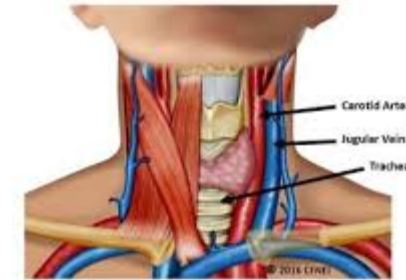
- Student will learn first aid for hanging.
- Student will learn about the consequences of strangulation injury.
- Student will learn the irreversible signs of death.

Hanging

- Hanging is the most common method for suicide.
- Approximately 1400 suicides per year in the Czech Republic (60% by hanging).
- Reduced air flow and/or blood flow to or from the brain via the intentional external compression (rope) of blood vessels or the airway in the neck.
- Only about 5 kg is sufficient to successfully hang by suffocation, so it is also possible to hang a knee or even lie down.
- The self-weight of the affected person will result in typical injuries leading to death. Noticeable strangulation groove

Suspension hanging will kill the person in many ways:

- Compression of the carotid arteries
- Compression of the jugular veins
- Compression of the airways.
- Dislocation/ fracture of the cervical spine > neck injury > paralysis of the respiratory muscles.
- Irritation of the nervus vagus (arrhythmia, erection, defecation).



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<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.forensicnurses.org%2Fpage%2FSTAssessment&psig=AOVaw24v8Zkc2i1cG6ABCCocu2F&ust=1596639825605000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCICT0>

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Signs/symptoms



- Choking / cardiac arrest / signs of death.
- Congestion of the face and neck. Redness, blood-red eyes.
- Conjunctiva-petechiae (pinpoint hemorrhages).
- Strangulation object - rope. Ligature marks ("rope burns")
- Cyanosis (ears, nose, lips)
- External signs of violence (bruising, abrasions, strangulation groove)

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.jems.com%2F2015%2F12%2F22%2Finitial-findings-in-strangulation-injury-aren-t-indicative-of->

[outcome%2F&psig=AOvVaw0XOKeXYmBHusXBDiqbQngR&ust=1596640985653000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCJDWiKjtgesCFQAAAAAdAAAAABAE](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.jems.com%2F2015%2F12%2F22%2Finitial-findings-in-strangulation-injury-aren-t-indicative-of-outcome%2F&psig=AOvVaw0XOKeXYmBHusXBDiqbQngR&ust=1596640985653000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCJDWiKjtgesCFQAAAAAdAAAAABAE)

First aid



- Call for help.
- Loosening the strangulation object-rope. Put the victim on the back.
- Urgent CPR where there are no signs of death or one of the vital functions is still maintained.
- In case of restitution of spontaneous circulation and breathing. Transport patients to the hospital.
- In the case of attempted hanging, always ensure immobilization of the cervical spine during transport.

Irreversible signs of death

- Post mortem staining.
- Post mortem lividity.
- Pos mortem stiffness (rigor mortis)
- Pallor mortis - pale skin.



- In case of irreversible signs of death, CPR is not started.
- CAVE: If not sure, always start CPR!

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Learning outcomes

- Student can explain the principles of first aid for hanging.
- Student can explain the mechanism of injury when hanging.
- Student lists irreversible signs of death.

References

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- ↑ "[Modern-day 'outlaws' gather to honour Jánošík](#)". The Slovak Spectator. July 9, 2012.

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