

Task: **Saw**
 Authors: Petr Černohorský (CZ)
 Francis Mencl (USA)
 Judges: Viliam Dobiáš (SK), Volodymyr Kizyma (SK)
 Jan Maršálek (CZ)
 Players: Táňa Bulíková (SK), Jan Maršálek jr. (CZ)

Time limit for task: **max. 11 mins**

Story get to team with instructions.

Story for team:

Emergency Dispatch Centre received emergency call and send you to:

Call from anxious wife, she found husband in the garden under the tree. He worked with the saw to care the trees. She do not know what happened, husband is rusty, maybe breathing, do not speak, injury or blood is not visible.

Your tasks:

- Assess scene and correct work management on site
- Examine and treat the patient, **exact and technically correct measures of BP, HR, SpO2 and other is important.**
- Define working diagnosis and differential diagnosis, administer the therapy
- Define direction according to local situation and possible following steps
- If hospitalization is needed, define mean of transport

Local situation:

- A** Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and obstetric, CT, biochemistry.
- B** Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, psychiatry, infectious diseases and pediatric dept.
- C** Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR.
- D** Leave the patient on the place.
- E** Helicopter rescue available at 15 mins. Landing on the scene is possible.

Conditions on the scene:

September 10, 2013 11:30am, clear sky temperature 20°C (68°F). Call to address time is 15 mins.

Situation on the scene:

Man of middle age lying under tree, beside him is saw and branch of wood. Sopororous, cyanotic, stertorous breathing, more less gasping, cold periphery, sweaty, peripheric puls filiform, badly palpable, without reaction to voice, tachycardic, without injury, isocoric pupils, evident edema of neck and face.

Physical examination:

Patient GSC 6 (no eyes opening - 1, no reaction to voice - 1, non targeted reaction to pain - 4), extreme oedema of neck and face, visible stings, cyanotic, extreme sweating. Neurological exam. without lateralization, without injury at chest, abdomen and limbs. No breath sounds by auscultation, percussion normal findings, retraction during inspirium, abdomen normal findings, lower limbs without edemas. Homans negat. Impossible to establish rescue breaths by mask. ETI, laryngeal cannula and combitube impossible to introduce.

Vital functions:

	After arrival	During task
RR (/min.)	5 (gasping)	-
SpO2 (%)	55	-
HR (min.)	130	-
GCS	E1 V1 M4=6	-
BP (mm Hg)	60 systolic by palpation	-
EKG	Sinus tachycardia	-
Temp (°C/°F)	36,6/98	-
Glycaemie (mmol/l)	6,6 (99 mg%)	-

Key words:

Emergency treatment in pre-hospital settings, evaluation of situation, urgent treatment, diagnose anaphylactic reaction to wild bees stingers, emergency koniopunction or koniotomy at model, correct treatment.

Team scoring		1	2	3	4	5	Max. points	Correct decisions and performance
							1 900	
1	Patient history and basic physical exam	Evaluation of situation on site	PH from wife	SpO2+Monitor+BP 3x20	Primary exam+O2 by mask 2x20		180	Situation evaluation, exclusion of trauma, edema of neck and stinger findings.
		40	40	60	40			
2	Correct physical exam. and optimal techniques to obtain BP, HR, glycaemia and SpO2	Systematic and correct physical examination: head, neck, chest, abdomen, limbs 5x30	Technique of BP taking	Technique and executing of ECG	Technique and executing of glycemia and oximetry	Diagnose	700	Complete and correct physical exam focused on BP technique, cuff size, place of auscultation, ECG leads placement, description of ECG curves. Working diagnose: anaphylactic shock with airway obstruction. Glycaemia: disinfection, first drop dry, second drop examine.
		150	150	150	150	100		
3	Airway management	Invasive airway management up to 3rd min.	Invasive airway management up to 4th min.	Invasive airway management up to 6th min.	Invasive airway management up to 8th min.	Over 8 min.	300	Etiology of suffocation, impossibility to introduce any cannula by mouth, invasive koniotomy or punction up to 3rd minute from start of examination. Paramedics crew: online consultation is not a matter of task, life saving procedure have to be done immediately.
		300	200	100	50	0		
4	Therapy	2 iv lines + crystaloids 20+20+30	Koniopunction+v entilation 150+150	Alternative koniopunction by cannulas	Epinephrine/Adrenalin +corticoids 80+20	Analgosedation + myorelaxation 50+50	570	Practical execution of koniotomy, minimal 2 iv access, 1000 ml crystaloids, artificial ventilation, epinephrine (Adrenalin) IV or IM, corticoids (hydrocortison, methylprednisolon or dexamethason).
		70	300	150	100	100		
5	Direction, transport	A by ground					50	Transport do the nearest hospital.
		50						
6	Player	Patient					100	Subjective evaluation by players according players rules.
		100						