Beaver Author: Jan Tamele (CZ) Rallye Rejvíz 2019

INT Veronika Mohylová, Pavlína Kazdová

Time limit for task: max. 12 mins Story get to team with instructions.

Emergency Dispatch Center received emergency call and send you to:

Drowning ++, unconsciousness, breathless, police on site performing CPR.

Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient(s).
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define direction according to local situation (see bellow).
- If hospitalization is needed, define mean of transport (see bellow) and prepare for transport.
- Inform the judge of any further steps.

Conditions on the scene:

Local situation

May 24, 2019, 11:00am, clear sky, light wind, moderate temperature 19°C/66,6°F. Call to address time is 8 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCH. If you are paramedic staffed ambulance, physician is available within 15 minutes after your request.

- A Nearest hospital 20km by ground transport. Depts: General surgery, Internal medicine with ICU, Anaesthesia and General Intensive Care, Neurology, Gynecology and Obstetrics, CT, labs.
- B Higher Level Hospital:42 km gy ground. Depts: as A and Emergency dpt., ENT, Oncology, Psychiatry, Pediatrics and Infection Unit.
- C Specialized Centre: 55 km by ground. Depts as B and Trauma Centre, Burn Unit, Pediatric ICU and resuscitation unit, Cardio Centre, Stroke Unit, ECMO, MRI.
- D Leave the patient on scene (if possible due to local EMS competence).

Means of transport: Information

E Helicopter Rescue Landing 15 minutes after request via EMS Dispatch Centre, landing on scene is possible.

Ground Team's own ambulance.

G Ground - next paramedic ambulance Arrival 15 minutes after request via EMS Dispatch centre.

H Ground - next physician ambulance Arrival 15 minutes after request via EMS Dispatch centre.

Another Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at your discretion.

Situation on the scene:

On the time of crew's arrival to the pond there is on the ground lying approximately 7 year old girl. CPR is performed by police. There is also about 14 year old girl's sister on the site, hysterically crying. Both girls were on the way home from their grandmother's house. They wanted to variegate the journey by hide and seek game. The younger didn't appear and didn't respond for calling even after ending the game, later the older one found her lying face down in the water. By that time there was police crew passing around the pond, they heard older sister's desperate shouting for help. They took the younger aid out of the water and started CPR.

girl out of the water and started CPR, than called dispatch centre with request for EMS crew - which comes in about 5 minutes and undertake CPR.

By adequate, calm, way of communication the older sister is cooperating, she tells that the younger one is otherwise healthy, she doesn't take any medication, there is no history of allergic reactions in her.

Their parents are on the way back home from work. If there is none taking care about her she shouts hysterically and attacks crews with demands for saving her sisters life.

Keywords:

 $Reassuming \ on \ non-professional \ CRP, \ communication \ with \ police-crew. \ Early \ request \ for \ helicopter \ on \ site, \ correct \ advanced \ CPR.$

Goal of the task:

Effective cooperation and communication with police crew on site. Calming down of the older girl and obtaining patients history of her and her sister. When right and effective CRP is performed than ROSC after 2 minutes. Transportation by helicopter to specialized centre C (Trauma Centre, pediatric Intensive Care Unit). Is acceptable to leave the older girl on site in cooperation with police, who assure contact with parents.

		Т	Т	Т		1			T
	Team Scoring	1	2	3	4	5	6	Max. points (w/o time)	Correct decisions and performance
								1 350	
1	Scene assessment	Getting information's from police	Cooperation with police crew	Early contact with dispatch centre (within 1 minute after arrival)				225	Getting information's about duration of CPR, duration of drowning and time spended in water, initial patients status.
		75	50	100					
2	Younger girl (drowning one)	Undertaking CPR from police, oxygenation 2x25	CPR, airway management according to crew possibilities (OTI, LMA, SGD)	BP, HR, SpO2, glycaemia 4x25	Temperature measuring within 2 minutes. Reassuring of thermal comfort. 50+25	i.v. or i.o. access, ECG, adrenalin 0.01 mg/kg 3x25	Capnometry, protective artificial ventilation 2x25	400	Body weight about 30 kg, ECG asystole, no measurable pulse, BP and SpO2, GCS 3, TT 35,2°C = 95,36°F, glycaemia 5.6mol/l = 100,8mg/dl, EtCO2 7 mmHg, emphasis on right dosage of adrenalin. Early temperature measurement, protective ventilation (emphasis on PEEP 5-10), preferably OTI high risk of aspiration (not counted in PARA crews). LMA or SGD possible alternatives.
		50	50	100	75	75	50		
3	Older sister (on the pond's bank)	Obtaining her patients history	Obtaining information about duration od drowning	Patients history of younger sister (AA, PA, FA) 3x25	Verbal calming down and communication with her	Devolve her to police crew or attempt to contact parents		250	Calming down of hysterical older sister, obtaining as much as possible information's about younger girl, securing care of police or parents for the older one. P: 140/min, BP: 125/85mm Hg, SpO2: 98%, GCS 15, TT 36,8°C / 98,24°F.
		25	50	75	50	50		1	
4	Differential diagnosis	Drowning with sudden cardiac arrest	Other conveciable diagnose					125	Determination of right diagnoses.
		100	25						
5	Directions and transport	Directions C or B	Transport E	HEMS activation within 3 minutes	HEMS activation later			200	Early HEMS activation for fast and gentle transport to specialized centre.
L		50	50	100	25				
6	Team Cooperation and Communication	Obvious teamleader	The crew communicates as a team and passes information to the leader	The leader receives and responds to information from the crew	Well managed and controlled patient handling	Team communication with patients and other actors		50	Crew cooperation as a team, obvious and visible teamleader. Unambiguous and clear communication with judges (no repeated questions about the same-usually vitals), patients and others. Introduce after arrival, informing the patient at every move, lift, touch, examination, procedure, transport and explaining why is this done.
L		10	10	10	10	10	-		io uno dono.
7	Actors	Child	Sister					100	Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc).
		50	50						Total 100, Dystaliaors, Williamson Groy.

EMS Dispatch centre received an emergency call and send you to:

Confused calling from anxious caller: "Can't breath"

Your tasks:

- Scene assessment and correct work management on scene.
- Examine and treat the patient(s).
- Define working (provisional) diagnosis and differential diagnosis and provide treatment.
- Define direction according to local situation (see below).
- If hospitalisation is needed, define mean of transport (see below).
- Inform the judge of any further steps.

Conditions on the scene:

May 24, 2019, 01:30pm, partly cloudy, 15°C. Call-to-site time is 10 minutes after summoning.

All requests and informations towars EMS Dispatch Center tend to judge marked as "Dispatch"

If you are paramedic staffed ambulance, physician is available within 15 minutes after your request.

Routing Distance by ground			Avaliable departments and equipment
Α	City hospital	5 km	Surgery, internal medicine, anesthesiology and intesive care, neurology, gynaecology and obstertrics, CT scan, biochemistry.
В	County hospital	20 km	As A + emergency department, otorhinolaryngology, oncology, psychiatry, infectious diseases, pediatry with intensive care unit.
С	Specialized centre	30 km	As B + traumacentre, burn injuries unit, cardiocentre, stroke unit, magnetic resonance.
D	Home	0 km	Leave the patient on scene (if possible due to local EMS competence).

	Means of transport	Informations
Ε	Helicopter Rescue	Landing 15 minutes after request via EMS Dispatch Centre, landing on scene is possible.
F	Ground	Team's own ambulance.
G	Ground- next paramedic ambulance	Arrival 15 minutes after request via EMS Dispatch centre.
Н	Ground- next physician ambulance	Arrival 15 minutes after request via EMS Dispatch centre.
1	Another	Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at your discretion.

Situation on the scene:

On the filter of the task, where the crew with the ambulance is parked, suddenly somebody knocks on the door of the ambulance. Person is bended forward, falling to the knees, heavy breathing, you can hear wheezing, very hard to communicate and is pointing to the car parked near the scene. In ideal case the crew checks the situation, checks the scene and call dispatch centre. In the parked car is present 18 years of teenager, which has deformity of the calf, groaning, very stressed, don't want to move. He says that he slipped and felt to the curb (edge) of pedestrian path and his parent was transporting him to the hospital. On the questions about his parent he answers that his parent has asthma and during the ride to hospital was breathing hard. On the from seat in the car is bag of the parent (contains drugs and medical record) and salbutamol spray. In necessary to split the crew and call dispatch centre for another ambulace.

Correct procedure:

1) Primary and secondary survey ABCDE priority treatment.

negative

- 2) Taking anamnesis (from patient, documentation).
- Achieve good communication with teenager.
- 4) Treatment of P1: O2, i.v. line, Adrenaline (0,5 1 μg/kg i.v. titrate (paramedic crew: possible to give adrenaline i.m. or s.c.), continuous monitoring of vital functions. Apnea and cardiac arrest occures in case of incorrect treatment.
- 5) Treatment of P2: achieve cooperation, alternatives in analgesia, extrication form car, leg fixation.
- 6) Calling for another crew.

Family anamnesis

7) Transportation to the closest hospital.

Anamnesis:	P1	P2
Personal informations	Helena Semanická (Pavel Semanický), age: 45 years	Petr Semanický (Tereza Semanická), age: 18 years
History	asthma bronchiale	none
Medication	Symbicort (budesonide), Ventolin (salbutamol) if necessary, Syntophylline	none
Allergies	pollen, dust, mites	none
Documentation	Last control by pneumologist: longer time without astmatic seizure, spirometry: moderate degree of obstruction, medication takes regullary, Ventoline approximately 2 times per week.	

negative

Vital functions	After arrival		During the task	After intubation and		Without	
			(5 min. after measurement of VF)	artificial pulmonary ventilation	After Adrenaline	treatmet aftes 7 mins	
Patient	P1	P2	P1	P1	P1	P1	
Pulse (/min)	140	125	56	98	112		
RR (/min)	35	20	8/min	12 (setting on ventilator)	20		
Capillary refill (s)	prolonged	normal	prolonged	prolonged	mild prolonged		
BP (mm Hg)	80/40	135/85	70/40	90/50	110/65		
SpO2 (%)	63	98	unmeasurable	93	91		
Glycemia (mmol/l)	6,8	5,6	6,8	7,4	7,2		
Body temperature (°C)	norm	al	normal	normal	normal		
GCS	13	15	11	sedated	15		
ECG	SR, ventricular extrasystoly	normal	SR, bigeminic ventricular extrasystoly	SR, rarely ventricular extrasystoles	normal SR	asystole	

P1: Auscultation findings: bilateral alveolar breathing, weaker sounds to hear, wheezing in all parts bilaterally, prolonged expirium, in time if no proper treatment- silent chest, no traumatic injuries, skin wet, cold, no swelling, acral and central cyanosis. Legs: no patological findings, neurologically: no patological findings.

P2: Auscultation findings: bilateral alveolar breathing, no patological sounds, cardiac rythm regullar, abdomen with no patological findings, One leg: lateral rotation, swelling, hematoma, opened fracture of calf, no significant bleeding, after proper analgetic treatment vital functions normal.

	Team Scoring	Α	В	С	D	E	F	Max. points (w/o time) 1 350	Correct decisions and performance
1	Anamnesis	P1 past history, medication, allergies 3x10	P2 past history, medication, allergies 3x10	P1 Finding medical report	P1 Information about used Ventolin			120	1A: astma bronchiale, LA: Symbicort, Ventolin, Syntophyllin, Allergies: pollen, dust, mites 1B: none 1D: Ventolin used while driving
		30	30	30	30				
2	P1	Ac+B 5x10	C 3x10	D + skin + glycemia 3x10	12 lead ECG	oxygen + i.v. line 2x10	continuous monitoring of VF	170	2A: A (free) + c-spine (fixation not necessary) + B (SpO2, RR, auscultation) 2B: C (BP, PR, CR) 2C: D (GCS) + skin (cyanosis) + glycemia
		50	30	30	20	20	20		
	P2	Ac+B 5x10	C+ D 4x10	Calf fracture	Cooperation of patient	i.v. line		170	3A: A (free) + c-spine (fixation not necessary) + B (SpO2, RR, auscultation) 3B: C (BP, PR, CR) + D (GCS) 3E: i.v. line after alternative treatment of pain
		50	40	20	30	30			
4	Treatment	P1 Adrenaline or Ketamine 150/75	P1 Orthopneic position + adequate treatment of asthma 20+30	P1 Crystalloids	P2 Alternative treatment of pain	P2 Leg fixation and sterile covering	Dispatch centre call for another ambulance	440	4A: Adrenaline by titration 0,5-1 μg/kg i.v, (max. 0,2 mg i.v., paramedic crews max 0,5 mg i.m. or s.c.) - full points, alternative is Ketamine 0,5-1 mg/kg i.v half of points 4B: no force to change position + treatment of asthma attack: corticosteroids, other sympatomirnetic (Bricanile i.v.), magnesium, other in correct dose 4C: crystalloids 20 ml/kg i.v. 4D: Pentrox inhalation, mucosal anatomised device (ev.bucal) - SFN, FNL, Ketamine
		150	50	20	150	50	20		4E: sterile covering + leg fixation
5	Diagnosis, directions, transport	P1 Status asthmaticus (silent chest)	P1 Respiratory failure	P1 Transport A via F (paramedics can also A via H)	P2 Opened calf fracture with dislocation	P2 Transport A via G		300	
		90	40	40	90	40			
6	Team cooperation and communication	Clear team leader	Team communication	Team leader is recieving informations	Organised and controlled manipulation with patient	Communication of crew with patient		50	Non technical skills (NTS) assessment.
		10	10	10	10	10			
7	Actors	P1	P2					100	Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc).
		60	40						paration, rollandos, systematro, minososo oto).

FtF Author: R. Okan Erol (TR) Rallye Rejviz 2019

MUC. RR René Mezulianik, Lenka Kohlová, Kateřina Nováková Judaes: RIP René Mezulianik, Lenka Kohlová, Juraj Povinský RZP Adriana Povinská, Markéta Jarušková, Ladislav Kleisl R. Okan Erol, Kateřina Nováková, Noriyoshi Ohashi INT

Time limit for task: max. 15 mins Story get to team with instructions.

Emergency Dispatch Center received call from city hospital and send you to:

Transfer a patient by air ambulance. You are air ambulance team and Emergency Dispatch Center wants you to make bed to bed transfer.

Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient.
- Define the patient is fit to fly (If patient could fly, flight time will be approximately 8 hours, air ambulance will make one technical landing during the flight).
- If patient is fit to fly: prepare him for transport.
- Make a plan of in-flight procedures and perform the appropriate procedures during the flight.
- Inform the judge of any further steps.

Conditions on the scene:

May 24, 2019, 03:45pm, light wind, moderate temperature. Flight plan: flight level is 33 000 feet and estimated cabin pressure at cruise altitude is up to 6 000 feet.

Situation on the air ambulance:

Air Ambulance Specification:

Spectrum Aeromed System Features & Options:

- Fully self-contained and lightweight
- 3500 liters of oxygen, dual air compressors, vacuum pump and 1000 Watt inverter
- AC outlets, DC outlets and pneumatic outlets
- Custom stretcher specifically designed for patient comfort

Medical Equipment:

- Monitor & Defi
- Transport Ventilator
- 4 infusion pump
- 4 syringe pump
- Suction unit
- Blood glucose meter
- Forehead digital thermometer
- Emergency drugs and material (airway management, fluids, syringes, etc.)

Situation on the scene:

At the ICU, crew takes over a patient with the medical report:

Patient, male, 65 years old, hypertension on therapy, COPD, no allergies. Admitted to ICU with acute respiration failure and artificial ventilation is necessary. By the attempt for CVK insertion a iatrogenic PNO was made, in right hemithorax, drained, drain is from this morning closed and disconnected.

St.p.: Sedation, orotracheal intubation, ventilation parameters: full, volume cycled, MV 8 L/min, RR 12/min, FiO2 MIX EtCO2 37 mmHg. Closed chest drain on the right. PNO is not completely healed yet, breathing on the right side is weakened. Invasive pressure monitoring in art. radialis and the central venous catheter in v. subcl. It is connected to invasive pressure monitoring via a two-chamber set. The list of administration medications is in the report.

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	Team scoring	1	2	3	4	5	Max. points (w/o time)	Correct decisions and performance
			_				1 350	
1	Assessment of Patient	Fast primary survey ABCDE (30) SAMPLE (30) TF, TK, DF, SpO2, EtCO2, glycemia, ABR, urine out., body temp. 9x10	Cross-check of administered medication for transport with medical report recommendatio n	Ask about PNO, chect tube closure	Ask about relatives approval for flight	Ask about contagious desease	425	1) Primary survey 30 pts, Tot. body exam, SAMPLE history 30 pts, HR RR BP SpO2 EtCO2 glycemia ABR, urine out. and body temp 9 x 10 pts 2) Cross-check - current medication vs pat. report 3) NOT fit to fly with closed drain - not healed PNO 4) Ask for patient/relatives approval 5) Pacient has no contagious
		150	50	100	100	25		
2	Flight Decision and Flight plan Assessment of Patient	Patient is Fit to Fly	PREPARE AİRWAY Airway management, ET tube cuff pressure control - manual or ask for self- expanding ETT cuff	Ventilation - ventilation mode setting PREPARE BREATHING Ventilation - setting of ventilation regime,	Circulation - suringe pumps, infusion pump, prepare and check drugs	Oxygen supply needs 50, coorect calculation 75	400	2) ETT cuff will expand, when atmospheric pressure drops down at level 6 000 ft and then is overpressure inside. Check manually, fix it, or use self expanding-self pressure correcting ETT cuff. 3) CMV-VCV, MV 8 l/min, Fi02 MIX 50% O2. 4) Invasive blood press. and CVP - correct placing of measuring chambers - height of R atrium. 5) O2 consumption. 7 L/min. Technical (drive) cons. 1 L/min = 8 l/min. Flight time 8x60 + 20% reserve =4608 L. O2 NEEDS 8 LT/M = 8*480:3840+%20=4 608 LT. MEANS TEAM NEEDS EXTRA 1 108LT * 1x5 L cylinder,1X2 L.
		100	50	75	50	125		
3	Simulation of Flight	Take-off: Check IBP, CVP, PR, SpO2, EtCO2 minimum 5x20 Urine out. (25)	Cruise level: Check IBP, CVP, PR, SpO2, EtCO2 minimum 5x20	In-flight tachyarrhythmia - define	Appropriate treatment of tachyarrythmia		425	1) Pat monitored: IBP, CVP, P, SpO2, EtCO2 and urine output. 2) Cruise level vital sign check. 3+4) Judge shows vital signs sheets: One minute as periodically for 2 hours. 0-2-4-6 hours. 4 hours sheet has SVT and team has to define it and give appropriate treatment, than depends on the teams action judge will show the last normal or arrhythmic sheet. Team has only one minute to diagnose arrythmia and do reaction. After judge gives last sheet, task is finished.
		125	100	100	100			
4	Actors	Patient	ICU Doctor	ICU Nurse			100	Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc.).
		50	25	25				

Calculate O2 supply for total flight time + 20% reserves. Give result as a count of standard 2L and 5L O2 cylinders with pressure 200 bar. You'll get the ventilation parameters within the task.

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MUC. RR Judges: Michal Pačiska, Danica Pompošová RLP Tomáš Vaňatka, Ladislava Budíková

RZP Lýdia Fehér, Danica Pompošová, Karel Špendlíček

Hunter INT Michal Pačiska, Jakub Ďurďa

Time limit for task: max. 12 min Story get to team with instructions.

Emergency Dispatch Center received call and sends you to:

Call from receptionist of the guesthouse: guests were attacked, the police are on their way.

Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient(s).
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define patient pathway according to local situation (see below).
- If hospitalization is needed, define mean of transport (see below) and prepare for transport.
- Inform the judge of any further steps.

Conditions on the scene:

May 24, 2019, 04:30pm, clear, no wind, 23°C. 8 minutes drive to scene.

All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCH.

If the paramedic crew, the physician's arrival to the event location is 15 minutes from the request via DISPATCH.

	Direction	Ground distance	Departments available
Α	Nearest hospital	8 km	Biochemistry, Surgery, Internal medicine, Neurology
В	Higher level hospital	20 km	as A + ED, Anaesthesia and general intensive care, CT, Pediatric with ICU, Neurology with ICU, Stroke unit, Infectious, ENT, psychiatry
С	Specialized center	30 km	as B + Cardiocentre, Trauma centre, Burn unit, Neonatology, Cerebrovascular Center, NMR, Neurosurgery
D	Leave the patient on scene	0 km	If possible due to local EMS competence.

	Means of transport	Information
Ε	Rescue Helicopter- HEMS	Arrival 15 mins after request through Emergency Dispatch Center. Landing on the scene is possible.
F	Ground	Teams own ambulance.
G	Ground - next ambulance with paramedic crew	Arrival 15 mins after request through Emergency Dispatch Center
Н	Ground - next ambulance with physician crew	Arrival 15 mins after request through Emergency Dispatch Center
- 1	Another	Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

Situation on the scene:

Hunter Pepa finds out about his wife's infidelity from his friends in a pub. Strengthened by alcohol, he wants to see it himself and goes to a nearby guest house where his wife cuckold him. After the invasion of the house, he finds his wife in flagranti.

After arrival:

The receptionist brings the crew to the room. There is already a policeman. The crew is discovering three patients on the site. Two of them are consciousness and one is extremely confused. There is no danger to the crew on site.

The correct procedure (see table for details):

Patient 1 (Hugo) - agitated, confused, hyperventilate, shouts that he doesn't feel his feet, a slightly bleeding cut on the forearm. A - free; B - hyperventilation, respiratory rate 25 per minute; C - mild tachycardia; D - isocoric pupils, GCS 15, normal blood glucose; E - forearm cut (max. 500 ml of blood loss). Therapy - stop bleeding, IV line, Exacyl (not rated) and 500 ml of balanced crystalloid, hyperventilation - calming, without a neurological finding, C-collar doesn't tolerate (no signs of C-trauma), Magnesium is not necessary.

Patient 2 (Hunter Pepa) - diabetic, stress and alcohol cause hypoglycemic coma, unconscious. A - head tilt and chin lift - difficult to maintain airways spontaneously; B - physiologic; C - CRT 2 sec, compensated; D - AVPU - U, GCS 5, hypoglycemia 1.5 mmol / I, isocoric pupils; E - physiologic, without trauma. Therapy - IV line, Glucose 40%. The patient becomes aggressive after waking up - verbally attacks other patients, police assistance is appropriate.

Patient 3 (Lenka) - unconscious, pain response, head wound; A - free; B - physiologic; C - CRT 2 sec, compensated; D - AVPU - P, GCS 8-14, normal blood glucose, isocoric pupils, amnesia, normal motor/strength & sensory test; E - hematoma on the forehead with small laceration, painful C spine; Therapy - wound cover, C-collar.

Anamnesis:	Patient 1	Patient 2	Patient 3
Personal info	Hugo Tvrdý, man, aged 30	Pepa Landa, man, aged 41	Lenka Landová, woman, aged 37
Previous history	negat.	Diabetes (Insulin-dependent)	negat.
Medication	0	Humulin, Lantus	contraception
Allergies	0	0	pollen, dust
Events	Patient after an attack, with forearm cut, blood loss max. 500 ml, thrown off by an attacker on a wall, where he hit his head, hyperventilation tetany, extremely confused, aggressive.	Stress exhaustion, drinking alcohol (a few shots and beers), hypoglycemic coma.	Patient after the attack, hit the head with a slap, then she fell by head on the door, unconscious for 2 mins, then she wakes up, a hematoma on the forehead, C-spine contusion, concussion (mTBI), amnesia

RA

Vital signs	Hugo	Pepa	Lenka
Puls (/min)	112	86	65
RR (/min)	25	12	15
CRT (s)	<2	<2	<2
BP (mm Hg)	180/80	110/75	120/80
SpO2 (%)	100	97	99
Glycemia (mmol/l)	6,3	1,5 - 8,5	8,2
Body temp. (°C)	36,9	37,1	36,2
GCS	15	5-15	8-14
ECG	sinus tachycardia	normal sinus rhythm	normal sinus rhythm

Keywords:

Hypoglycemia, hypoglycemic coma, more patients, attack.

		1	ı	ı					T
	Team Scoring	1	2	3	4	5	6	Max. points (w/o time)	Correct decisions and performance
								1 350	
1	Patient 1 (HUGO)	Previous history	Allergies	A + B SpO2 (15) auscultation (15) D - pupils (15) 3x15	C Puls (15) CRT (15) BP (15) stop bleeding (40)	E physical examination (incomplete) 60 (25)	Therapy IV line (30) 500 ml of crystalloid (30) calming the patient (30) Exacyl within 5 minutes (0)	300	Patient 1 (HUGO) - calming, C - stop bleeding, A - free, B - mild tachypnea (25'), w/o pathological phenomena, C - CRT 2 s, physiologic VF, D - isocoric pupils, hyperventilation tetany, E - head without pathology, cervical spine painless, cut forearm, others without pathology. Therapy: C-collar - the patient does not tolerate, but there must be an attempt to apply. Stop bleeding - common wound bandage. Patient calming (magnesium iv., anxiolytics), max. 500ml of balanced crystalloid, Exacyl 1g within the first 5 minutes.
		10	10	45	85	60	90		
2	Patient 2 (Hunter PEPA)	Previous history (Diabetes)	Allergies	A airway management (50) C-collar (15)	B + C SpO2 (15) auscultation (15) Puls (15) CRT (15) ECG (15)	D GCS / AVPU (15) glycemia (15) pupils (15) E phys. exam. (30)	Therapy Glucose 10- 40% (40) repeat blood glucose test (20) calming (20)	315	Patient 2 (Hunter PEPA) - diabetic, unconscious after attack, A - stridor - airway management (head tilt & chin lift) - normal breathing, C-collar (C-spine trauma possible), B+C - physiologic, ECG w/o pathology (SR), D - unconscious, AVPU - U, GCS 5 (1-1-3), glycemia 1,5 mmol/l, isocoric pupils, reaction ++, E - body w/o trauma, soft abd. Therapy: IV line, Glucose 10-40% - a return of consciousness, AVPU - A, GCS 14 (4-4-6), a repeat of glycemia (8,5 mmol/l), aggressive (request police for help), calming (application of anxiolytics).
		10	10	65	75	75	80		
3	Patient 3 (LENKA)	Previous history	Allergies (pollen, dust)	A C-collar (50) B+C SpO2 (15) auscultation (15) Puls (15) CRT (15)	D GCS / AVPU (15) pupils (15) E hematoma of head (15) C-spine (15) abdomen (15)	Neurological exam: amnesia (10) motor/strength & sensory (30) extremities (20)	Therapy wound cover (20) C-collar (see 3C)	285	Patient 3 (LENKA) - hit the head with a slap, then she fell by head on the door, unconscious for 2 minutes, A - airway management, C-collar, B+C - physiologic, D - AVPU - P, GCS 8 (2-2-4), after she wakes up AVPU - A, GCS 14 (4-4-6), amnesia, normal motor/strength & sensory exam, E - hematoma on the forehead with small laceration, painful C-spine, soft abdomen. Therapy: wound cover, C-collar
		10	10	110	75	60	20		
4	Diagnosis	P1 (HUGO) Hyperventilation (20) Forearm cut (20)	P2 (Hunter PEPA) Hypoglycemia (20) Alcohol intoxication (20)	P3 (LENKA) Concussion (mTBI) (20) Haematoma / laceration on the forehead (20) C-spine contusion (20)				140	P1 (HUGO) - Hyperventilation tetany, forearm cut (requires surgical suture), max. 500 ml of blood loss (w/o shock) P2 (Hunter PEPA) - Hypoglycemia (insulindependent diabetes), alcohol intoxication P3 (LENKA) - Concussion (mTBI), Haematoma / laceration on the forehead, C-spine contusion (CT necessary)
		40	40	60					
5	Direction Transport (incl. preparation for transport)	P1 (HUGO) to A via F (20+20) (sitting)	P2 (Hunter PEPA) to A via G (20+20) (sitting)	P3 (LENKA) to B via G/H (20+20) immobilization on the scoop (20)	Transport HUGO and PEPA together	Police escort (Hunter PEPA)		160	No physician is required during transport. Transport is evaluated only if the offender is not transported together with the affected persons. A police escort of Hunter PEPA is recommended (alcohol intoxication). Request for 2 other cars for transport.
-		40	40	60	0	20			
6	Team Cooperation and Communication	Clear and obvious teamleader	The crew communicates as a team and passes information to the leader	The leader receives and responds to information frem the crew	Well managed and controlled patient handling	Team communication with patients and other actors		50	Crew cooperation as a team, obvious and visible teamleader. Unambiguous and clear communication with judges (no repeated questions about the same - usually vitals), patients and others. Introduce after arrival, informing the patient at every move, lift, touch, examination, procedure, transport and explaining why is this done.
\vdash		P1	P2	P3	10	10			Subjective evaluation by actors/simulated
7	Actors	HUGO 40	Hunter PEPA 20	LENKA 40				100	Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc).
									•

Rallye Rejviz 2019 - Pac-Man

		Rejviz 2019 - Pac-Man	
No. 1	Question AVPU	Right answer Alert, Voice, Pain, Unresponsive	Points 40
2	STEMI	ST elevation myocardial infarct	40
3	General symptoms of HYPOTYREOSE are: fatigue, bradycardia, weight loss, hypoventilation, cold and dry skin, irregular menstruation	No - weight increase	40
4	The section of the curve to which the arrow points is INSPIRIUM / EXPIRIUM?	EXPIRIUM	40
5	5. What do the GCS figures mean: GCS 2-3-3	Eyes pain/ Answer - inadequate/ motor flexion for pain	40
6	Describe the correct placement of the electrodes in the 12 lead ECG (exact placement)	R RED - right upper extremity, L yellow - left upper extremit, F green - left leg, N black - right leg, V1 - 4 intercostal, from clavicula i medioclavicular line RIGHT, V2 - dtto LEFT, V3 - between V2 and V4, V4 - V6 5. intercostal (V4 medioclavicular, V5 front axilar, V6 midle axilar)	40
7	What time period shows 37 mm on millimeter ECG paper, when the paper is moved at 25mm / second	1,48 s (37 : 25 = 1,48s)	40
8	SOPOR	As a deep sleep, only a reaction to an algic stimulus, inarticulate sounds, it falls quickly back to sleep	40
9	ISOKORIE, ANISOKORIE, MIÓZA, MYDDRIÁZA	same size, different side size, widened, tapered	40
10	The patient, man, 86 years old, says he suffers from "ejaculatio praecox". What does the patient suffer from?	rapid ejaculation F52.4	40
11	How many mg of Cordaron do we give after the 5th unsuccessful CPR? (ERC 2015)	150 mg	40
12	How many mg of Cordaron do we give after the 5th unsuccessful CPR? (ERC 2015)	1st period - opening 2nd period - expulsion 3rd time - to bed, placental delivery	40
13	Basic Drugs for Urgent CPR? (according to ERC 2015 guidelines)	Adrenalin, Cordarone, O2	40
14	Murphys symptom	Pain in palpation under right rib arch and simultaneous inhalation - in cholecystitis.	40
15	"missed at least 3 menstruation in a row "	Amenorhea	40
16	How many pairs of ribs does the human chest have and what species?	12 pairs of ribs - 7 true, 3 pseudo, 2 free	40
17	"Orthopnoe"	Orthopnoea is a respiratory distress tied to a supine position that forces you to change position.	40
18	The strength of the first defibrillation shock in a child weighing 8kg (according to ERC 2015 guidelines)	32J	40
19	Sitting 3-year-old child, not speaking, unable to swallow, salivation, hypoxia, cyanosis of lips.	Epiglotitis	40
20	DIGITUS	finger	40
21	Collum femoris	neck of femur	40
	Mingazzini's symptoms	We invite you to close your eyes and stretch the upper limbs with your palms down. We monitor instability or decline for about 30 seconds.	40
	METHANE	MY CALL SIGN - volaci znak, identifikace a postavení EXACT LOCATION - přesná pozice místa TYPE OF INCIDENT - typ událostí HAZARDS - rizika na místě událostí ACCESS TO SCENE - příjezdové trasy na místo HPZ NUMBER - odhad počtu postžených, případně charakteristika EMERGENCY SERVICES - záchranné složky přítomné a potřebné	40
	What year of Rallye Rejviz was in 2016?	20	40
	How many questions does Pacman have?	25	40
	Total points (w/o time)		1 000

Pták Author: Petr Černohorský (CZ) Rallye Rejvíz 2019

MUC. RR Judges: Petr Černohorský, Lukáš Ludwig, Zdeněk Chovanec

RLP Petr Černohorský, Lukáš Ludwig
RZP Zdeněk Chovanec, Petr Theuer
INT Lukáš Konečný, Mateusz Zgoda

Time limit for task: max. 12 mins Story get to team with instructions.

EMS Dispatch centre received an emergency call and send you to:

Hang glider crash, patient located on a slope, conscious, severe bleeding, hysterical girlfriend present on site, unable to cooperate with Dispatch Center.

Your tasks:

Bird

- Scene assessment and correct work management on scene.
- Examine and treat the patient(s).
- Define working (provisional) diagnosis and differential diagnosis and provide treatment.
- · Define routing according to local situation (see below).
- If hospitalisation is needed, define mean of transport (see below).
- Inform the judge of any further steps.

Conditions on the scene:

May 24, 2019, 04:00pm, clear, no wind, 20°C. Call-to-site time is 8 minutes after summoning.

All requests and informations towars EMS Dispatch Center tend to judge marked as "Dispatch"

If you are paramedic staffed ambulance, physician is available within 15 minutes after your request.

Local situation

- A Nearest hospital 20 km by ground transport. Depts: General surgery, Internal medicine with ICU, Resuscitation unit, Neurology, Gynaecology and Obstetrics, CT, labs.
- B Higher Level Hospital:42 km gy ground. Depts: as A and Emergency dpt., ENT, Oncology, Psychioatry, Pediatrics and Infektion Unit.
- C Specialised Centre: 55 km by ground. Depts as B and Traumacentre, Burn Unit, Cardiocentre, Stroke Unit, ECMO, MRI.
- D Leave the patient on scene (if possible due to local EMS competence).

Means of transport: Information

E Helicopter Rescue Landing 15 minutes after request via EMS Dispatch Centre, landing on scene is possible.

F Ground Team's own ambulance

G Ground- next paramedic ambulance Arrival 15 minutes after request via EMS Dispatch centre.

H Ground- next physician ambulance Arrival 15 minutes after request via EMS Dispatch centre.

Another Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at your discretion.

Situation on the scene:

Due to gust of wind during takeoff from a slope hang glider crashes, accident site is located 200m uphill, patient is conscious, screams due to pain, severe bleeding from right leg, girlfriend present on site, upset and uncooperative.

Physical examination:

P: Adult male, lying on his back, pale, diaphoretic, conscious, wears integral helmet, GCS 4-5-6, screams due to pain, open fracture of right distal third of femur with massive arterial bleeding, no head trauma, isocoric, responsive/symetrical, no oral/nasal/auricular discharge, back painful on palpation located in C-Th, no lateralization, thorax intact, no crepitation. P 130/min regular, breathing clear with no pathology, BP 90/50, capillary refill 5s, a. radialis bilaterally thready, abdomen painful, present peristalsis, painful on palpation, distension of symphysis, pelvic crepitus, left lower limb negative, right lower limb open fracture of right distal third of femur with massive arterial bleeding, bright red blood sprays from wound, no peripheral pulse, invervation intact. When team starts to bring out their equipment, they discover dismantled laryngoscope.

Goal of the task:

Provide pre-hospital care. Assess situation, consider possible hazards, retrieve medical history including allergies, complex physical examination, AcBCDE approach.

Recognition of life threatening bleeding, treatment by manual compression and consequently applying tourniquet as soon as possible, stabilising VF, immobilisation of pelvis, C spine, immobilisation and treatment of open fracture, body temperature management, analgesia, volumetric therapy, transport to Traumacentre, ideally by HEMS. Reassembly and functionality check of laryngoscope after physical exhaustion.

	Team Scoring	1	2	3	4	5	Max. points (w/o time)	Correct decisions and performance	
	ream scoring		2	3	7		1 350	Correct decisions and performance	
1	Obtaining of available informations about scene and incident	Assessment of the situation	Safe access	Information retrieval and inclusion of girlfriend	Call for Police		100	Safe approach - protective gear (shoes, gloves, helmet unscored), assess hazards, early request for police assistance via Dispatch. Effective inclusion and calming of girlfriend.	
		20	20	40	20				
2	Medical history, examination, dg.	Medical history, primary examination 2 x 25	Working dg.: Hemorrhagic shock due to open fracture of right lower limb,pelvic fracture	SpO2 + EKG + TK + CRT 4 x 25	Pelvic fixator	MILS + helmet removal + cervical collar 3 x 25	375	Medical history retrieval, primary examination AcBCDE inlcuding body temperature, define working diagnosis, VF monitoring, helmet removal, MILS, cervical collar, pelvic fixator.	
		50	100	100	50	75			
3	Treatment	1 x IV line, crystalloid 500 ml 2 x 30	full body immobilisation	Sterile dressing + hypothermia prevention 2 x 20	O2 mask	mILS + helmet removal + cervical collar 3 x 25	250	Secure I.V. Line: Warmed balanced crystalloid - permisive hypotension. Sterile dressing of open fracture, immobilisation, hypothermia prevention, analgesia, isothermal foil, O2.	
		60	80	40	20	50			
4	Hemorrhage management	Compression + tourniquet within 1 min	Compression + tourniquet within 2 min	Over 2 min	Compression + pressure bandage applied within 1 min	ompression + pressure bandage applied after 1 min	305	Stop arterial bleeding by manual compression and tourniquet application, correct tightening within 1 min, pressure bandage accepted as equal treatment even though it is not optimal solution in this exact type of injury.	
		305	100	0	150	0			
5	Laryngoscope reassembly	in 1 minute	over 1 minute				50	Reassembly and functionality check of laryngoscope after physical exhaustion.	
<u> </u>		50	0						
6	Routing and means of transport	Routing C	Transport E	3 minutes	HEMS activation within 5 minutes		120	Optimal solution - early/immediate activation of HEMS and consequent HEMS transport to Trauma-centre	
\vdash		40	40	40	15				
7	Team Cooperation and Communication	Clear and obvious teamleader	The crew communicates as a team and passes information to the leader	The leader receives and responds to information frem the crew	Well managed and controlled patient handling	Team communication with patients and other actors	50	Crew cooperation as a team, obvious and visible teamleader. Unambiguous and clear communication with judges (no repeated questions about the same-usually vitals), patients and others. Introduce after arrival, informing the patient at every move, lift, touch, examination, procedure, transport and explaining why is this done.	
		10	10	10	10	10			
8	Actors	Patient	Wife				100	Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc).	
	ļ	80	20						

Strach Author: Katarína Lažová (SK) Rallye Rejvíz 2019

MUC. RR Judges: Katarína Lažová, Zuzana Tomašovičová
RLP Zuzana Tomašovičová, Dana Nosovská
RZP Alena Rechová, Katarína Lažová

Fear INT Zuzana Markuseková, Marina Kalogridaki, Jan Veselý

Time limit for task: max. 10 mins Story get to team with instructions

EMS Dispatch center received an emergency call and send you to:

Father reports his 10 years old child has head and abdomen pain, weakness, bruises all over his body. Conscious, no trauma mechanism, medical condition worsened considerably today.

Your tasks:

- Scene assessment and correct work management on scene.
- Examine and treat the patient(s).
- Define working (provisional) diagnosis and differential diagnosis and provide treatment.
- Define direction according to local situation (see below).
- If hospitalization is needed, define mean of transport (see below).
- · Inform the judge of any further steps.

Conditions on the scene:

May 24, 2019, 10:30pm, clear, no wind, 15°C. Call-to-site time is 8 minutes after summoning.

All requests and information's towards EMS Dispatch Center tend to judge marked as "Dispatch" If you are paramedic staffed ambulance, physician is available within 15 minutes after your request.

Local situation

- A Nearest hospital 20 km by ground transport. Depts: General surgery, Internal medicine with ICU, Anaesthesia and General Intensive Care, Neurology, Gynecology and Obstetrics, CT, labs.
- B Higher Level Hospital:42 km gy ground. Depts: as A and Emergency dpt., ENT, Oncology, Psychiatry, Pediatrics and Infection Unit.
- C Specialized Centre: 55 km by ground. Depts as B and Trauma Centre, Burn Unit, Cardio Centre, Stroke Unit, ECMO, MRI.
- D Leave the patient on scene (if possible due to local EMS competence).

Means of transport: Information

E Helicopter Rescue Landing 15 minutes after request via EMS Dispatch Centre, landing on scene is possible.

F Ground Team's own ambulance

G Ground- next paramedic ambulance
 H Ground- next physician ambulance
 I Another
 Arrival 15 minutes after request via EMS Dispatch center.
 Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at your discretion.

Situation on the scene:

Family tries to live a healthy life-style, children are not allowed sweets or any kind of junk food, fruit and vegetables are preferred. As many times before child played in the basement 3 days ago. Found nice colorful little pellets and ate a few assuming they are sweets. They did not taste good but fearing punishment kept quiet. Father confirms placement of rodent poison in basement. After 3 days child's medical condition worsens.

Child: Complains irregularly for 3 days of head pain, parents assume child is making it up to avoid school and dismiss it. Since this morning child is pale, weak, complains of head and abdomen pain and they noticed bruising on child's body. Child is conscious, fatigued, no vomiting, loss of appetite, declines traumatically mechanism of injury, no consciousness impairment.

Course of action: Meticulous retrieval of medical history from both parents and child, when child is questioned for atypical or curious things - admits to eating "sweets" in the basement. Checking and monitoring VF, securing poison specimen or packaging. Consultation with Toxicology Center or Dispatch Physician, define correct type of transport and routing.

Kevwords:

Child, head pain, medical history, poison, sweets.

Team Scoring A B C D E (w/o time) 1 On arrival Constraint of Greeting and Content and Scoring and Content and Scoring and Sc	_		ı	1	1	1	1		T	
Treating children requires specific and sensitive approach. It is hold in able to communication in communication in communication in the child allowed and retireme information from the child		Team Scoring	Α	В	С	D	E		Correct decisions and performance	
Past medical history from parents Past medical history from parents Past medical history from parents Past medical history and parents Past medical history from child	1	On arrival	communication with parents	communication with child					approach. If the child is able to communicate it is imperative to talk and retrieve information from the	
Past medical history from parents Past medical history and parents Past medical			20	20						
Medical history from child Past medical history, family diseases, medications 3x30 Allergies, chief complaint table poisoning, 3 unusual food, 4 fl forbidden consumables 4x30 90 60 120 200 70	2		history	diseases, medications, allergies, chief complaint 4x20	health issues of other family members	(staying abroad), vaccinations 2x10	1) possible trauma, 2) food poisoning, 3) unusual food, 4) forbidden consumables 4x10	190	medication, no allergies. Chief complaint: According to provided information, other family members have no present medical issues.	
Past medical history from child diseases, medications 3x30 Allergies, chief diseases, medications 3x30 Past medications 3x30 Allergies, chief diseases, medications 3x30 Past medications 3x30 Past medications 2x30 Allergies, chief diseases, medications 3x30 Past medications 2x30 Past medication and informing of past medication and parents and pare			30	80	20	20	40			
4 Child examination Vital functions (BP, P, SpO2, body temperature, GCS, glycaemia) 6x10 5 Discovering and securing poison, consultation Facuting, transport Repeated VF check Secondary examination Piscovering poison or equesting poison Facuting, transport Repeated VF check Secondary examination: bruising Consulting or requesting poison or expressing poisoning suspicion Secondary examination: bruising Consulting or requesting poison or expressing poisoning suspicion Secondary examination: bruising Consulting or requesting poison or expressing poisoning suspicion Secondary examination: bruising Toxicology center or Dispatch Physician Secondary examination: bruising 1) Discovering poison or expressing poisoning suspicion Secondary examination: bruising Toxicology center or Dispatch Physician Secondary examination: bruising Toxicology center or Dispatch Physician Secondary examination: bruising 1) Discovering poison or expressing poisoning suspicion Secondary examination: bruising Toxicology center or Dispatch Physician Secondary examination: bruising Toxicology center or Dispatch Physician Secondary examination: bruising 1) Discovering poison or expressing poisoning suspicion Secondary examination: bruising 1) Discovering poison or expressing suspicion Secondary examination: bruising 1) Discovering and securing poison or expressing poison or expressing poison or expressing suspicion Secondary examination: bruising 1) Discovering poison or expressing suspicion Secondary examination: bruising 1) Discovering poison or expressing suspicion Secondary examination: bruising 1) Discovering poiso	3	Medical history from child	history, family diseases, medications	complaint	1) possible trauma, 2) food poisoning, 3) unusual food, 4) forbidden consumables	with child without parents or with one parent	domestic	540	medication, no allergies. Chief complaint: Head and abdominal pain, fatigue, bruising. Admits to eating colorful pellets in the basement 3 days ago but kept quiet fearing punishment. 4) Without parents/grandparents present, child is talkative and provides information. With one parent present 75 bodů.	
4 Child examination Child examination Chi			90	60	120	200	70		o) Defiles dofflestic violence.	
Securing poison or equesting poison or requesting poison or requesting poison or requesting poison, consultation	4	Child examination	(BP, P, SpO2, body temperature, GCS, glycaemia)	,				100	P: SpO2: Body temperature: GCS: Glycaema:	
Expressing suspicion of poison, consultation Discovering poison Discovering poison Discovering poison Discovering poison Physician Dispatch poison Specimen or packaging Dispatch physician Dispatch ph			60	20	20				, ,	
Routing B (pediatric ICU) 40 40 Continuous explanation and informing of provided aid and parents And parents Routing B (pediatric ICU) F Routing B (pediatric ICU) 40 Continuous explanation and informing of provided aid and course of action (transport to what will follow). Explaining child's medical condition to parents. Explaining course of action (transport to hospital)	5		suspicion of poisoning	poison	or requesting poison specimen or packaging	Toxicology center or Dispatch Physician		200	suspicion 2) Secure specimen or packaging or request parents to provide specimen or packaging 3) Consultation with Toxicology Center (antidote vit. K) or with Dispatch physician - according to national	
Routing, transport (pediatric ICU) F 40 40 Continuous explanation and informing of provided aid and parents And parents Respecting relationship between parents and child. Continuous information (what is happening, why and emphatic approach (transport to (transport to many course of action (transport to many course of action). Respecting relationship between parents and child. Continuous information (what is happening, why and what will follow). Explaining child's medical condition to parents. Explaining course of action (transport to hospital)			50	50	50	50			apadinos.	
Continuous explanation and informing of provided aid and parents Communication with child and parents Communication with child and parents Communication with child and course of action (transport to the company of	6	Routing, transport	(pediatric ICU)	F				80		
To Communication with child and parents explanation and and parents explanation and and course of action (transport to towards parents) Explanation of further course of action (transport to towards parents) Non-combative, respectful and emphatic approach (transport to towards parents) Continuous information (what is happening, why and what will follow). Explaining child's medical condition to parents. Explaining course of action (transport to hospital)			40	40						
parents and child nemocnice). Non-combative, respectful and	7		explanation and informing of provided aid and course of action to parents	further course of action (transport to hospital)	respectful and emphatic approach towards parents and child			60	Continuous information (what is happening, why and what will follow). Explaining child's medical condition to parents. Explaining course of action (transport to hospital) Vysvětlení dalšího postupu (transport do nemocnice). Non-combative, respectful and	
20 20 20	-		20	20	20				, ,,	
Team Cooperation and Communication The crew communicates as a team and passes information to the leader The leader receives and responds to information from the crew The leader receives and responds to information from the crew Well managed and controlled patient handling 40 Crew cooperation as a team, obvious and visible teamleader. Unambiguous and clear communication with judges (no repeated questions about the same-usually vitals), patients and others. Introduce after arrival, informing the patient at every move, lift, touch, examination, procedure, transport and explaining why is this done.	8		teamleader	communicates as a team and passes information to the leader	receives and responds to information from the crew	and controlled patient handling		40	teamleader. Unambiguous and clear communication with judges (no repeated questions about the same-usually vitals), patients and others. Introduce after arrival, informing the patient at every move, lift, touch, examination, procedure, transport and explaining why	
10 10 10 10	-		10	10	10	10				
9 Actors Mother Father Child Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc.).	9	Actors						100	, , , , , , , , , , , , , , , , , , , ,	

Authors: Ilja Chocholouš (CZ), Kateřina Zvonařová (CZ) Rallye Rejvíz 2019 Scarp

Ján Dobiáš, Alena Dudeková, Václava Novotná, Carsten Harz, Alexander Mattes Judges:

Time limit for task: max. 20 mins Story get to team with instructions.

Emergency Dispatch Center received emergency call and send you to:

Bus accident with multiple casualties, available EMS crews are being dispatched. ETA 15-20 mins. Fire Department and Police are informed and on their way.

Assessment of the scene and correct work management as first crew on site until additional EMS crews arrive.

Conditions on scene:

May 23, 2019, 10:00pm, clear, no wind, 5°C. Call to address time is 10 mins.

All requests and information towards Emergency Dispatch Center to be communicated via two-way radio.

Additional crews will arrive as specified by Emergency Dispatch Center.

Local situation:

	Direction	Distance by ground transport	Available departements
A	Nearest hospital	15 km	Anesthesia and General ICU, CT, Biochemistry, General Surgery, Internal Medicine with ICU, Neurology.
В	Higher level hospital	30 km	Anesthesia and General ICU, CT, Biochemistry, Pediatric with ICU, General Surgery, Infectious Disease, Internal Medicine, Neurology with ICU, ENT, Psychiatry, ED, Trauma.
С	Specialized Centre	60 km	Depts: as B + Trauma Centre, Burn Unit, MRI, Cardiac Centre, Stroke Unit.

Means of transport: Information

F Helicopter Rescue Unavailable.

F Ground Team's own ambulance.

Arrival 15 minutes after request via EMS Dispatch centre. G Ground- next paramedic ambulance H Ground- next physician ambulance Arrival 15 minutes after request via EMS Dispatch centre.

Another Describe and justify to judge.

Situation on the scene:

EMS crew is arriving as first respondent to the scene of a bus traffic accident. 12 injured passengers are located inside and outside the bus. More EMS crews are being despatched by Emergency Despatch Centre with estimated time of arrival 15-20 mins. Communication with Emergency Despatch Centre is possible via two-way radio only.

Extent of injuries is indicated by photo or wound simulation. Examination and physical assesment is done by crew members. Fire Department is arriving in 4 mins.

- 1) Correct work management as the 1st responding crew at the scene, proper documentation, METHANE report.
 2) Integration of Fire Department and system cooperation.
 3) Triage (START/Triage Tags), provide neccessary treatment.

- 4) Transfer of Command.
 2nd EMS crew with Chief MCI Commander will arrive 2 mins before end of the task to take over. MCI Commander will hand over to him, including documentation. Task will end with given time limit or once completed.

	Taem Scoring	A	В	С	D	E	F	Max. points (w/o time)	Correct decisions and performance
-								2 700	
1	Primary Report (structured)	METHANE I: 1) report to have reached the site of accident	METHANE I: 2) exact location 3) type of incident 2x25	METHANE I: 4) safety/hazards 5) access routes 2x25	METHANE I: 6) estimated number of casualties	METHANE I: 7) report available resources and request for extrra resources	Availability of Mass Casualty and Disaster Equipment + designation of MCI Commander 60+40	340	After reaching the site of accident it is neccessary to report to Despatch Centre. First sighting immediately indicates higher number of casualties. Other EMS crews are required. It is neccessary to inspect and search the site, state site security and potential hazards, estimate the damage. After site inspection is done MCI Commander calls Dispatch Centre structured report METHANE. Site inspection and search is organised and systematic with clear instructins given about the directions of search and ways to report findings. MCI Commander is designated and should be clearly marked and visible. Crew is equiped with Mass Casulty and Disaster kit.
\vdash		50	50	50	50	40	100		
2	Site Inspection	Decision made and instructions given about coordinated site inspection and search 150 Spontaneous site inspection 75 None 0	given to report findings of site inspection and search 150 Spontaneous reporting 75 None 0	Communication and cooperation with Fire Department, specification of requests towards FD	Structered report (METHANE II.) once site inspection completed Complete Report 200 Incomplete 100 Not done 0	MCI Commander documentation chart Available 120 Improvised 40 None 0		720	All crew members have their roles assigned. EMS crew works in cooperation with Fire Department (Commander of Accident) - reconfirming safety, completing site inspection and search, communicating further management. Based on results MCI Commander calls Dispatch Centre complete structured report METHANE II. It is considered a mistake if triage is done before that point. As Crew is the first respondent at the scene, proper site inspection and search is essential for the most exact evaluation and extent of the accident.
		150	150	100	200	120			
3	Triage (START/TriageTags)	Decision made and instructions given about organised triage 100 Spontaneous triage 50 None 0	Correct triage 12x40	Mental Status 12x10	Respiration 12x10 Circulation 12x10	Provide neccessary treatment 3x20	Triage documentation chart Available 100 Improvised 40 None 0	1100	After site inspection is performed and reported to Emergency Despatch Centre, crew continues with triaging. Additional EMS crew is not yet present. Correct triaging and documenting whole triage process is essential. Use of colour coded bands (START) or Triage Tags/Cards is accepted. Volunteers have photos and description of their injuries including vital signs and other specific parameters neccessary for triage and completing of triage tags.
		100	480	120	240	60	100		and completing of thage tage.
4	3rd Report (structured)	METHANE III: exact number of casualties	METHANE III: colour coding, priorities	METHANE III: resources available at the site, extra resources required				160	After triage is completed MCI Commander has to report to Emergency Despatch Centre number of casualties, including colour coding, and request for extra resources.
<u></u>		40	80	40					
5	Transfer of Command	Actual report of situation at the site (safety measures, use of available resources)	Access and Egress routes, means of transport	Complete triage report + triage chart 60+60	MCI Commander documentation hand over			380	Another EMS crew arrives with Chief MCI Commander(doctor). MCI Commander(EMS team leader) hands over all available information and documentation to Chief MCI Commander.
L		70	70	120	120				

Ivona Žůrková (CZ), Vladimír Husárek (CZ) Rallye Rejvíz 2019 Turista Authors:

> MUC. RR Rozhodčí:

RZP

Vladimír Husárek, Ivona Žůrková

Ivona Žůrková, Peter Porubský RLP Vladimír Husárek, Jana Podolková

Erwin Feichtelbauer, Vladimír Jarušek, Konstantinos Stokkos Tourist INT Judges:

Time limit for task: max. 12 mins Story get to team with instructions.

EMS Dispatch center received an emergency call and send you to:

Wife calling your crew for her 30 years old husband after a collapse and he have shortness of breath. They are in hotel room, where they came after tourist trek.

Your tasks:

- Scene assessment and correct work management on scene.
- Examine and treat the patient(s).
- Define working (provisional) diagnosis and differential diagnosis and provide treatment
- Define direction according to local situation (see below).
- If hospitalization is needed, define mean of transport (see below).
- Inform the judge of any further steps.

Conditions on the scene:

May 24, 2019, 4:00 pm, clear, no wind, 20°C. Call-to-site time is 5 minutes after summoning. All requests and information's towards EMS Dispatch Center tend to judge marked as "Dispatch" If you are paramedic staffed ambulance, physician is available within 15 minutes after your request.

Local situation

- A Nearest hospital: 10 km by ground transport. Depts: surgery, internal medicine with ICU, neurology, anesthesia and general intensive care, gynecology and obstetric, CT, biochemistry.
- B Higher Level Hospital: 22 km by ground transport. Depts: as A + ED, ENT, Oncology, Psychiatry, Infectious, Pediatric with ICU.
- C Specialized Centre: 38 km by ground transport. Depts: as B + Trauma Centre, Burn Unit, Cardio Centre, Stroke center and NMR.
- D Leave the patient on scene (if possible due to local EMS competence).

Means of transport: Information

Landing 15 minutes after request via EMS Dispatch Centre, landing on scene is possible. E Helicopter Rescue

Ground

G Ground- next paramedic ambulance Arrival 15 minutes after request via EMS Dispatch center. H Ground- next physician ambulance Arrival 13 minutes after request via EMS Dispatch center.

Describe and justify to judge. I Another

Report to judge (example): "Direction A, transport F" and any additional information at your discretion.

Situation on the scene:

Calling from hotel room, where is man with progress of tachypnea, shortness of breath, weakness. In room is sitting patient in orthopneic position, with tachypnea, shallow and spastic breathing, breath sounds are normal on the one side, they are nearly inaudible on the other side. Two minutes after crew coming patient have altered conscious level - he is unconscious with seizures. After the seizures there is cardiac arrest - pulseless electrical activity (PEA). ALS CPR algorithm. Reversible causes of cardiac arrest. Right diagnosis. Technical skills of CPR and NTS.

Keywords:

ALS

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	Team Scoring	1	2	3	4	5	Max. points (w/o time)	Correct decisions and performance	
	ream ocorning		_		7	,	1 350	Correct decisions and performance	
1	Primary examination (ABCD)	B - Breathing: RR, listening, auscultation, cyanosis, SpO2	C - Circulation: BP , CRT, pulse rate, 4 leads ECG, limb temperature	D - Disability: GCS/AVPU, pupils, mobility of both sides, paresthesia's, meningeal symptoms, blood glucose.	E - Exposure: Body temperature, skin examination, check of the swellings, 12 lead ECG	Patient history, previous diseases	125	125	Patient approach - ABCDE. Patient history - diabetes mell. I. type (after his journey, without food), asthma (do not use his medication).
		25	25	25	25	25			
2	Therapy	Recognition of PEA	Give adrenalin 1 mg (3 - 5 min)	After 2 minutes of CPR, recheck the rhythm.	Needle decompression.	Treat the hypoglycemia.	250	In second minute cardiac arrest (PEA - right recognition) - CPR. Tension pneumothorax - needle decompression. Hypoglycemia - glucose therapy.	
		50	25	50	75	50			
3	Other procedures	Airway - ETI or LMA during CPR	i.v. or i.o. access	Self adhesive electrodes	etCO2	Oxygen (20), Salbutamol inh. (25)	140	Secure the airways (OTI/LMA). Vascular access. Monitoring. EtCO2. Oxygen - first (adequate flow) for patient with tachypnea, during CPR (high flow - FiO 1,0).	
		25	20	25	25	45			
4	CPR	Adequate rate	Correctly released	Adequate depth	Adequate ventilation		400	100 % = 100 points	
		100	100	100	100				
5	Working diagnosis	Tension pneumothorax	Hypoglycemia	Causes of tension pneumothorax	Causes of hypoglycemia		150	Causes of tension pneumothorax (asthma without medication). Causes of hypoglycemia (Diabetes mell. I. type).	
		50	50	25	25				
6	Direction and transport	ROSC	Post- resuscitation care	Direction A	Transport H (F)	Continuous monitoring	135		
<u> </u>		50	20	25	20	20			
7	Team cooperation and communication	Obvious teamleader	The crew communicates as a team and passes information to the leader	The leader receives and responds to information from the crew	Well managed and controlled patient handling	Team communication with patients and other actors	50	Crew cooperation as a team, obvious and visible teamleader. Unambiguous and clear communication with judges (no repeated questions about the same-usually vitals), patients and others. Introduce after arrival, informing the patient at every move, lift, touch, examination, procedure, transport and explaining why is this done.	
		10	10	10	10	10			
8	Actors	Patient	Wife				100	Subjective evaluation by actors(simulated patients, relatives, bystanders, witnesses etc.).	
	<u> </u>	50	50						