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MUC, RR, RLP, RZP, INT

Time limit for task: max. 12 mins

Story get to team with instructions.

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

Impact of a zorbing ball into a cable car pole, patient unconscious, bruised, bleeding heavily, hysterical partner with him, unable to cooperate with Emergency Dispatch Center.

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 routing according to local situation (see below).
- If transport is needed, define mean of transport (see below).
- Inform the judge of any further steps.

Conditions on the scene:

October 01, 2021, 09:00am, clear, no wind, 20°C. Call-to-site time is 8 minutes after summoning.
 All requests and information towards Emergency 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 by ground. Depts: as A and Emergency dpt., ENT, Oncology, Psychiatry, Pediatrics and Infektion Unit.
- C** Specialised Centre: 55 km by ground. Depts as B and Traumacentre, Burn Unit, Cardiac Centre, Stroke Unit, ECMO, MRI.
- D** Leave the patient on scene (if possible due to local EMS competence).

Means of transport:

- E** Helicopter Rescue
- F** Ground
- G** Ground- next paramedic ambulance
- H** Ground- next physician ambulance
- I** Another

Information

Landing 15 minutes after request via EMS Dispatch Centre, landing on scene is possible.
 Team's own ambulance.
 Arrival 15 minutes after request via EMS Dispatch centre.
 Arrival 15 minutes after request via EMS Dispatch centre.
 Describe and justify to judge.

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

Situation on the scene:

Zorbing ball crashes into cable car pole, ruptures, patient inside, bruised, unconscious, twitching HKK, massive bleeding from thigh PDK, incident about 200 m up slope, his partner on scene, upset, uncooperative.

Physical examination:

P1: Adult man lying on back, inside deflated zorbing ball, cyanotic, RR 6/min, mouth covered by plastic ball material, inspiration obstructed, seizures of upper extremities, no verbal response, pain stimulus with mimic muscles response, involuntary movements, GCS 2-2-4, open fract. right femur w severe external bleeding, no brain trauma, pupils iso, RL +/- symetrické, ears, mouth, nose w/o secretion, back bone w/o pain by palpation, painful at C-Th region, neurological exam symmetric, chest w/o crepitus, HR 130/min reg, breathing w/o pathological sounds, BP 90/50, CRT 5s, a. radialis bilat. weak pulse, abdomen diffuse pain, peristalsis +, pain at womb, crackles at pelvic bones, left lower extrem. normal, right lower extremity open fract. w arterial bleeding, w/o pulse on periphery, movements intact. After jaw thrust and removing obstructive plastic slow unconsciousness improvement, RR 12/min

Goal of the task:

Provide PNP for this case. Assessment of the situation, safe approach, history taking including allergy, detailed physical examination, AcBCDE approach. Recognition of DC obstruction, release by advancing the mandible and removing the obstruction, diagnosis of life-threatening bleeding, stopping by manual compression followed by tourniquet placement in the shortest possible time, ensuring vital signs, stabilization of pelvis, C-spine, immobilization and treatment of open fracture, thermal comfort, analgesia, infusion therapy, transport to trauma center, optimally LZS. 1 crew member after hill run- set up IO set, dilution and administration of Adrenaline for CPR of child e.g. 6.5 kg intraosseous on model.

Team Scoring		1	2	3	4	5	Max. points (w/o time)	Correct decisions and performance
							1 350	
1	Obtaining of available informations about scene and incident	Evaluation on scene, safety measures 20+10	Information and cooperation of friend	airway opening	Recognition of severe arterial bleeding	Call for police	290	Safe access - shoes, gloves, helmet not evaluated, risk stratification, immediate call for Police through Emergency Line. Obstruction airway and severe bleeding recognition, calming friend
		30	40	100	100	20		
2	Patient	Patient history, primary exam 2 x 25	Working diagnosis: haemorrhagic shock with open femur fracture, pelvic fracture, hypoxia by suffocation	SpO2 + ECG + BP + CRT 4 x 25	Pelvic sling	MILS + C collar 2 x 25	350	PH, examination AcBCDE incl. Temperature, working diagnosis, monitoring VF, inline stabil neck and head, C collar, pelvic sling
		50	100	100	50	50		
3	Patient therapy	1 x IV line, crystalloid 500 ml 2 x 30	whole body immobilisation	Sterile dressing + hypothermia prevention 2 x 20	O2 by mask	Immediate analgesia (i.o., i.m., nasal, rectal)	230	IV line, warm balanced crystalloid, permissive hypotension, sterile bandage of open fracture, immobilisation, heat loss prevention, thermofolie, oxygen
		60	60	40	20	50		
4	Stop bleeding	Compression + tourniquet up to 1 minute	Compression + tourniquet up to 2 min	over 2 min		Compression + pressure bandage up to 1 min	200	Stop bleeding by manual compression and tourniquet, exact up to 1 min, alternative pressure bandage (even if it is not ideal in this situation)
		200	100	0		50		
5	Dilution and IO administration	to 1 min	to 2 min				80	epinephrine dilution to 10ug/kg and IO administration
		80	40					
6	Routing and means of transport	P1 C via E		HEMS activation within 3 minutes	HEMS activation within 5 minutes		100	Optimálně transport pacienta do traumacentra za využití LZS, včasná aktivace LZS.
		60		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 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 this is done.
		10	10	10	10	10		
8	Actors	Patient					50	Subjective evaluation by actors (simulated patients, relatives, bystanders, witnesses etc).
		50						