PRE-HOSPITAL SIMULATION COMPETITION

VIITH MEDITERRANEAN EMERGENCY MEDICINE CONGRESS

Task: **Vagelis Reinhard**
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Players: Štefan Trenkler (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:
Motorbike crashed in a tree.

Your tasks:
- *Assess scene and correct work management on site*
- *Examine and treat the patient*
- *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 and prepare for transport*

Local situation:
A *Nearest hospital: 8 km by ground transport. Depts: basic surgery, internal medicine (neurologists on duty nonstop), gynecology, obstetric and biochemistry.*
B *Medium level hospital: 25 km by ground transport. Depts: as A + ED, anaesthesia and general intensive care, ENT, CT, neurologic dept. with ICU, psychiatry, infectious diseases and pediatric dept. with ICU.*
C *Specialized central hospital: 12 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre with cath lab, stroke unit, NMR.*
D *Helicopter rescue available at 10 mins. Landing on the scene is possible.*
Conditions on the scene:
September 09, 2013 5:30pm, clear sky temperature 20℃ (68°F). Call to address time is 15 mins.

Situation on the scene:

On arrival:
Driver (P1) is laying in the middle of the road with altered level of consciousness, he is confused and took his helmet of by himself.
He is sweating profusely and covering his right lower rib cage due to pain. Vitals see below. BP can't be obtained easy since he is wearing his motorbiker dress (if undressed it will be 90/60). This patient just needs O2, stabilization, load and go. Inside the ambulance we can give him fluids (but not aggressive). Two lines just to keep it open. He doesn't need intubation because SpO2 99% with non-rebreather mask and the hospital is near.
Passenger (P2) has only a broken arm. Vitals see below. He just needs an ABCDE and analgesia.
Approach: Team must ask if the scene is safety and call trafic police or FD to secure the scene and the motorbike. Request for second ambulance (it was dispatched parallel, crew didn't get the information at inital dispatch.
Examination:
Team must treat the patients due to the motorbike accident. The teams must recognize critical patient (internal bleeding, liver laceration?, rib#?) of P1 and load him in ambulance and go. When team ask for second ambulance, judge say it will be on scene in three minutes. After three minutes the judge say to the team: "the second ambulance arrived so you are free from the second patient".
Treatments (see below also): C-spine board required for both patients, also cervical collar.
Stabilize patient's 2 the broken arm and must ask for allergies before give analgesia. If asked patient states he had a severe reaction to morphine and thinks he is allergic to that.
Inside virtual ambulance for patient 1 must start iv access and oxygen with non-rebreathing mask.

Vital functions:	After arrival		During task	
	P1	P2	P1	P2
RR (/min.)	22 (shallow)	15	-	-
SpO2 (%)	93	98	99 (with mask)	-
HR (min.)	140	110	-	-
GCS	E4 V3 M5=12	15	-	-
BP (mm Hg)	90/60 (if undressed)	135/90	-	-
EKG	SR tachycardia	Sinus tachycardia	-	-
Temp (℃/°F)	36,6/98	36,6/98	-	-
Glycaemie (mmol/l)	5,5 (99 mg%)	5,5 (99 mg%)	-	-

Key words:

The specialized centre whith traumacentre is very close to the scene, 12 km, arrival less than 10 minutes. The crew must LOAD the patient 1 and GO to the hospital.
Not necessary to lose time on scene due to the internal bleeding of patient.

	Team scoring	*1*	*2*	*3*	*4*	*5*	*Max. points* 1 400	*Correct decisions and performance*
1	Scene safety	Ask for Scene Safety	Ask for Police or Fire Departement	Ask for a second ambulance within first 3 minutes			80	The team must ask for traffic police or Fire Departement to secure the scene and the motorbike. If the teams ask for scene safety the judge say "as you see".
		20	20	40				
2	Patient 1 (driver)	Stabilize head with cervical collar (20) and use C-spine board etc. (20)	ABCDE Check for radial Pulse and Frequency (50);BR (20), BP (0) ,SpO2 (20) Monitor (10)	Recognition of critical patient (internal blood loss) (100) + load patient in Ambulance before 6th minute (300) and leaving	Recognition of critical patient (internal blood loss) (100) + load patient in Ambulance between 6th and 8th minute (100) and leaving	Recognition of internal bleeding (50) after 8th minute or stay on scene > 10 min (0)	540	The team must examine the patient, stabilize him, recognize the internal bleeding and decide load and go because the traumacenter is less than 10 minutes.
		40	100	400	200	50		
3	Patient 1 (inside ambulance)	Secondary Survey, Neurological Exam, SAMPLE 5x10	Latest point for Oxygen with non-rebreather mask	Two i.v. and fluid administration	Alert Trauma Team at Hospital	Direction C by ground	290	Team must make secondary survey inside ambulance. Include neurological exam. (eyes, neck, strength and movement of limbs) injures. Administrate fluids and keep lines open.
		50	20	20	50	150		
4	Patient 2 (passenger)	Stabilize head with cervical collar (20) and use C-spine board etc (20)	ABCDE Check for radial Pulse and Frequency (50);BR (20), BP (0) ,SpO2 (20) Monitor (10)	Ask for SAMPLE **allergies** (50), treat the pain (50) before stabilize the broken arm (50) IF ALLERGIES NOT ASKED 0 POINTS.	Secondary Survey, Neurological Exam 5x10	Report to the second ambulance crew about patient's situation	390	The team must examine the patient, stabilize him, treat the pain and ask for second ambulance due to load and go the first patient. PATIENT MAY NOT RECEIVE ANY OPIATES SUBSTANCES; Nitronox (N2O + O2), Livopan (N2O), Ketanes (ketamin) etc are OK.
		40	100	150	50	50		
5	Players	Patient 1	Patient 2				100	Subjective evaluation by players according players rules.
		50	50					