





















HASIČI Město JAVORNÍK



Mediální partneři:



HvězdaŽivota.cz



16. ročník dětské záchranářské soutěže HELPÍKŮV POHÁR 16<sup>th</sup> Year of the Childern´s Rescue Competition HELPIK´S CUP

8. ročník soutěže operátorů ZOS ZLATÉ SLUCHÁTKO 8<sup>th</sup> Year of the EMS Dispatchers Competition GOLDEN HEADSET

4. ročník soutěže studentů lékařských fakult MUC. RR 4<sup>th</sup> Year of the Medical Students Competition MUC. RR



| Čelovka              | Den | MUC. RR<br>NAT-RLP<br>NAT-RZP | Rozhodčí: | Andrea Smolková, Dana Nosovská<br>Radka Fousková, Michaela Hartošová<br>Lenka Šrahulková, Dana Nosovská | RALLYE REJVÍZ 2014                   |
|----------------------|-----|-------------------------------|-----------|---|--------------------------------------|
| Headlamp             | Day | INT-PHYS                      | Judges:   | Andrea Smolková, Adéla Hažmuková  |                                      |
| Time limit for task: |     | INT-PARA<br>max. 12 mins      |           |   | Story get to team with instructions. |

# Story for team:

Emergency Dispatch Centre received emergency call and send you to: A man called to dispatch centre and told that his wife collapsed in the bathroom and now is not communicating.

# 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.

# Conditions on the scene:

May 23, 2014, 10:30pm, clear sky, calm, temperature 15°C (59°F). Call to address time is 5 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

# Místní situace:

- The closest hospital is 10 km ground transport. Equipment: surgery, internal medicine, pediatrics, an anesthesiology and intensive care, biochemical laboratory. Α
- The higher type hospital is 20 km ground transport. Equipment like A and, in addition, Gynecology and Obstetrics, CT, ORL, Psychiatry, Oncology, Emergency department and в Department of infectious disease.
- Specialized centre 55 km ground transport. Equipment like B and, in addition Traumacentre, Department for the treatment of burns, Cardiology and magnetic resonance imaging С unit
- D Leave the patient on the place.

#### Mean of transport: Information Е Helicopter rescue Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. Ground By your ambulance. F Ground - next ambulance with paramedic crew Arrival 15 mins. after request through Emergency Dispatch Center. G H Ground - next ambulance with physician crew Arrival 15 mins. after request through Emergency Dispatch Center. 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:

Upon arriving at the place, the crew goes to the apartment, where there is complete darkness. Husband has a small flashlight and explains that a while ago he heard loud blow and in the entire apartment supply electrical power dropped out. The patient's husband did the crew into the bathroom. There the patient (about a 25 year old woman) is situated in the bath, is hanged over the edge. The bath is empty, dry, and the woman is lying face down, unconscious and not breathing. The old hair dryer (turned off) is hanging from the wall on the electric cord. The targeted questions husband answers, that the woman was drying hair in the bathroom and then he heard a strong blow, after which the electricity was dropped out. A electricity cannot be restored and the crew has the only light source - own headlamps. The husband will not lend you his headlamp, nor can help you. He is looking after a sleeping child (will not work in the role, the only mention of it). Husband answers targeted questions, that a woman is healthy, not suffering from anything, no operation, no medication in history, has a two year old daughter, the last meal before the 3 hours, no alcohol, no food allergy. After removing her from the bath and initial examinations is to find the following: the unconscious GCS 3 (1-1-1), not breathing, pulseless, inicial recorded rhythm on ECG is

ventricular fibrillation. After 5 minutes of CPR in terms of ERC guidelines (2010) is the ROSC. In the second examination then crew will find excoriation on the forehead and burn injury on palm of the right hand. The crew makes all the activities in the dark, you may use your own headlamps.

# Key words:

Cardiac arrest, ventricular fibrillation, CPR, ROSC, electrical shock/accident, burn.

|   | Team scoring   | 1   | 2   | 3  | 4  | 5   | Max. points<br>1 300 | Correct decisions and performance  |
|---|--|---|---|--|--|---|----------------------|--|
| 1 | Orientation at the scene                                 | Searching of<br>electricity<br>breakdown<br>cause                   | Searching of<br>patient's<br>unconsciousnes<br>s and electricity<br>breakdown<br>connection/relat<br>ionship  | Light<br>source/headlam<br>p supplying   |  |   | 120                  | <ol> <li>Finding from the husband, that in the flat is<br/>electricity dropping out.</li> <li>Finding that the patient was drying her hair,<br/>when the loud blow was heard. Since then,she<br/>is unconscious.</li> <li>Own headlamps or any other light source.</li> <li>Will be evaluated all or nothing</li> </ol>  |
|   |  | 30  | 30  | 60   |  |   |                      |  |
| 2 | Patient examination,<br>history and correct<br>treatment | Consciousness,<br>pulse,<br>breathing, initial<br>ECG rythm<br>4x10 | Cervical spine<br>fixation during<br>evacuation   | History (past<br>morbidity,<br>recent medical<br>conditions,<br>alergy, last<br>meal and<br>alcohol)<br>5x10   | Finding and<br>treatment<br>excoriation on<br>the forehead | Finding and<br>treatment of<br>burn injury on<br>the right hand<br>palm | 180                  | <ol> <li>Finding the unconscious GCS 3, not<br/>breathing, pulseless, ventricular fibrillation.</li> <li>The head and neck fixation by both hands<br/>of one crew member.</li> <li>To each question oriented asking,<br/>evaluated individually.</li> <li>Solution of the evaluated 50% finding and 50%<br/>treatment</li> </ol>   |
|   |  | 40  | 40  | 50   | 30   | 20  |                      |  |
| 3 | The crew cooperation and the action quality              | Clear and<br>obvious crew<br>leader                                 | Crew<br>(Balanced<br>points<br>distribution<br>among the<br>other members,<br>except the<br>leader)<br>2 memb: 30+30<br>3 memb:<br>20+20+20<br>1 memb: 60 | The early<br>beginning and<br>the proper<br>working of the<br>CPR + proper<br>drug<br>administration<br>(amiodaron +<br>adrenalin/epine<br>phrin)<br>30+30+15+15 | Working with<br>headlamps                                  | Overview of<br>devices and<br>drugs                                     | 250                  | <ol> <li>In the team is the clear leader, who controls the action, issuing a loud, clear and meaningful instructions, shall be addressed to the members of the crew, summarizes the information obtained and proposed course of action.</li> <li>Each member is evaluated separately. We consider the participation of team work, cooperation with leader, the steps rationality.</li> <li>Start CPR immediately after the patient evacuation and finding cardiac arrest. The correct sequence of steps and medications.</li> <li>Hembers of the crew do not dazzle each other.</li> <li>The crew has an overview of medical equipment, each member has an overview of utility using by him, (without the liing around the ampoules and syringes). Nobody steps on anything but empty packagings (except glass ampules).</li> <li>Graded evaluating</li> </ol> |
|   |  | 60  | 60  | 90   | 20   | 20  |                      |  |
| 4 | The quality of CPR                                       | Appropriate<br>speed (%)<br>100% = 140                              | Appropriate<br>deep (%)<br>100% = 140   | Appropriate<br>hand position<br>(%)<br>100% = 140  | CPR performed<br>at least 5<br>minutes<br>(ROSC)           |   | 560                  | After 5 minutes (minimum 5 mins) of high-<br>quality and effective CPR - ROSC.<br>1-3) Graded evaluating<br>4) All or nothing  |
|   |  | 140   | 140   | 140  | 140  |   |                      |  |
| 5 | Diagnosis, direction                                     | Electric shock/<br>injury   | Cardiac arrest,<br>VF and CPR   | Possible the<br>head and neck<br>injury  | Burn after<br>electric shock                               | A via F - PHYS<br>A via F or H -<br>PARA                                | 190                  | 1-5) All or nothing  |
| L |  | 50  | 50  | 30   | 30   | 30  |                      |  |

| Knoflíkáři                | Den              | MUC. RR<br>NAT-RLP              | Rozhodčí:  | Martin Šrahulek, Vladimír Husárek<br>Martin Šrahulek<br>Mistic I luc (sel | RALLYE REJVÍZ 2014                   |
|---------------------------|------------------|---------------------------------|------------|---|--------------------------------------|
| Buttoners                 | Day              | NAT-RZP<br>INT-PHYS<br>INT-PARA | Judges:    | Vladimír Husárek<br>Pavel Tobiáš, Denisa Förtö                            |                                      |
| Time limit for task:      |                  | max. 15 mins                    |            |   | Story get to team with instructions. |
| Story for team:           |                  |                                 |            |   |                                      |
| Emergency Dispatch Center | er received emer | gency call and se               | nd you to: |   |                                      |

Your tasks:

Assess scene and correct work management on site.

- Examine and treat the patient(s).
- If hospitalization is needed, prepare for transport.

# Conditions on the scene:

May 23, 2014, 10:30am, clear sky, calm, temperature 22°C (72°F). Call to address time is 15 mins.

All requests and information towards Emergency Dispatch Center should be directed to judge marked as DISPATCHER.

Castle gardener felt from the ladder on the tree from height around 3 m. Unable to move. Boat rental available.

# 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, oncology, 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.

| Mean of transport:                            | Information   |
|---|---|
| E Helicopter rescue                           | Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. |
| F Ground                                      | Team own ambulance.   |
| G Ground - next ambulance with paramedic crew | Arrival 15 mins. after request through Emergency Dispatch Center.                                   |
| H Ground - next ambulance with physician crew | Arrival 15 mins. after request through Emergency Dispatch Center.                                   |

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mergency ugn Describe and justify to judge.

Another

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

# Situation on the scene:

Gardener felt from the ladder on the tree from 3 m height on the island in the middle of castle pond. Lye on the ground, conscious, cry. Dg.: fracture of the left second thigh (calf). Crew leave equipment on the bank of the pond. All necesary equipment is at the patient site. Crew have to approach patient by boat, examine patient by ABCDE and prepare him to transport with proper immobilization technique. After preparation to transport crew come back. Time limit is from leaving the beach to report "prepared to transport".

### Key words:

Immobilisation devices and transportation techniques and correct use of its.

|          | Team scoring   | 1   | 2   | 3   | 4   | 5  | Max. points<br>950 | Correct decisions and performance   |
|----------|--|---|---|---|---|--|--------------------|---|
| 1        | Transport to patient   | Boat/1st team<br>member                         | Boat/2nd team<br>member   | Boat/3th team<br>member                                       | Boat/4th team<br>member                             |  | 120                | 3 members crew = 40 points/member. 4<br>members crew = 30 points/member.<br>Swimming is not suitable, problem with<br>equipment taking. Boat is available.  |
|          |  | 60/40/30  | 60/40/30  | 40/30   | 30  |  |                    |   |
| 2        | ABCD   | A   | В   | С   | D   |  | 60                 | Primary survey according ATLS.  |
|          |  | 15  | 15  | 15  | 15  |  |                    |   |
| 3        | Cervical collar  | Head fixation                                   | Right size<br>check   | Correct<br>placement  | Firm position<br>and check of<br>placement          |  | 100                | Cervical collar according guidelines.   |
|          |  | 25  | 25  | 25  | 25  |  |                    |   |
| 4        | Pelvic sling   | Dg.: knee<br>pressure (25) or<br>open book (10) | Pocket check -<br>emptying  | Positioning of<br>pelvic sling over<br>trochanters            | Optimal power<br>of fixation                        |  | 100                | Extra points for new pelvic examination by<br>knee pressure. AT pelvic fracture is knee<br>pressure against fist impossible. It is more<br>tenderness than pelvic pressure.<br>Použití pánevního pásu dle platných<br>quidelines.   |
|          |  | 25  | 25  | 25  | 25  |  |                    | 5   |
| 5        | Vacuum splint on lower<br>extremity  | Preparation                                     | Extremity with<br>slight flexion at<br>knee                                     | Get under and positioning                                     | Suction and fixation                                |  | 100                | Dg.: second thigh (calf) fracture. Vacuum splint according guidelines.  |
|          |  | 25  | 25  | 25  | 25  |  |                    |   |
| 6        | Scoop  | Size evaluation                                 | Placement with<br>minimal move<br>by pts  | Handblock on<br>the scoop<br>during transfer                  | Removing to<br>vacuum<br>mattress                   |  | 100                | Scoop use according guidelines.   |
|          |  | 25  | 25  | 25  | 25  |  |                    |   |
| 7        | Vacuum mattress, heat<br>loss prevention   | Preparation                                     | Placement   | Modelling<br>around head of<br>the pts                        | Suction and fixation                                | Termofolie: use<br>(25), covering<br>around (50)   | 170                | Vacuum mattress use according guidelines.<br>Correct application of alufoil (plastic foil)  |
|          |  | 20  | 25  | 25  | 25  | 75   |                    |   |
| 8        | Teamwork, co-operation<br>within team  | Evident team<br>leader                          | Crew<br>communicate<br>as team and<br>members pass<br>informations to<br>leader | Leader accept<br>and react to<br>informations<br>from members | Guided and<br>regulated<br>manipulation<br>with pts | Communication<br>between crew<br>and patient<br>(cope with<br>distractors from<br>surroundings,<br>optimal<br>information to<br>pts) | 100                | Teamwork evident, teamleader visible with<br>clear commands.<br>Clear and mutual communication within team<br>without repeating questions to pts and judge.<br>Introduce themselves to patient at arrival,<br>information about what we are doing and<br>whyduring examination, clothes off etc.<br>Crew on command of leader, adequate<br>leadership, optimal communication with<br>patient. |
| $\vdash$ |  | 20  | 20  | 20  | 20  | 20   |                    |   |
| 9        | Actors<br>(simulated patients, patient<br>relatives, witnesses,<br>bystandors ato) |   |   |   |   |  | 100                | Subjective evaluation by actors according<br>actor's rules.   |
|          | bystanders etc.)   | 100   |   |   |   |  |                    |   |

| Kuchař               |       | MUC. RR      | Rozhodčí: | Daniel Kvapil, Tomáš Hlaváček                     | RALLYE REJVÍZ 2014                   |
|----------------------|-------|--------------|-----------|---|--------------------------------------|
|                      | Noc   | NAT-RLP      |           | Daniel Kvapil, Radka Abrahámková                  |                                      |
|                      |       | NAT-RZP      |           | Kateřina Zvonařová, Ivo Trháč                     |                                      |
| Cook                 | Night | INT-PHYS     | Judges:   | Patric Lausch, Marek Przybylak, Marios Sfakinakis |                                      |
|                      |       | INT-PARA     |           | Radek Janoch, Tomáš Hlaváček                      |                                      |
| Time limit for task: |       | max. 10 mins |           |   | Story get to team with instructions. |

# Story for team:

Emergency Dispatch Center received emergency call and send you to: 57 years old man unconsciousness, probably gasping, but family refuse to provide 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).

# Conditions on the scene:

May 24, 2014, 00:30am., clouds, no wind, 12°C (54°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

### Local situation:

- Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and А obstetric, CT, biochemistry.
- B Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, oncology, psychiatry, infectious diseases and pediatric dept.
- Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR. С
- Leave the patient on the place.

# Mean of transport:

Information

E Helicopter rescue Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. Team own ambulance. Ground G Ground - next ambulance with paramedic crew Arrival 15 mins. after request through Emergency Dispatch Center. H Ground - next ambulance with physician crew Arrival 15 mins. after request through Emergency Dispatch Center. Describe and justify to judge. Another н

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

# Situation on the scene:

Patient in terminal stadium of lung cancer. Decided to die at home, family is trying to help him in this situation. Hospice home care comes regularly and GP wisits patient regularly. Pain control set correctly. Patient seddenly deteriorated, got unconscious, gasping for breath. Family was not prepared for such situation, they do not know what to do andcall Emergency line for help, notify the dispatcher that a man (57 years old) fell unconscious and is gasping for breath. They follow dispatchers advice to put the patient on his back, but refused providing CPR. Familly is waiting in front of their house and will try to stop crew - if they cooperate - they will inform them, that their close relative is dying due to lung cancer and they will provide the crew with complete documentation from last visit at oncology. They called Emergency line bacause they don't want him to suffer. If the crew will not stop and listen to the family, rest of family will not go inside with them. Only patient's wife will go with them, will be sitting next to patient holding his hand. Patient is unconscious, occasionally gasping for breath, agonal rytmh on the monitor, puls oxymetry 0, CRT more than 3s, BP not measurable, after 2 miniutes cardiac arest, asystole, apnoe, death. Peitent in bed, no reaction, ocassionaly gasping for breath.

Wife try to inform crew about patient, give him out-patient report. She wants to stay with husband. She (figurant) will behave, as crew (as mirror - if they are kind, she is too, if they are agresive - she will expelling the cerw from house)

Rest of family will cooperate, but if crew will "treat too much" - they will tell tham, that they can't to be there and go away.

# Correct procedure:

Hear the family and receive all important information about the patient. Evaluate the situation and condition of the patient and decide not to start CPR. Support the family in their decision of taking the patient home from hospital to die among his relatives. Leave the family with patient and support their care - talking to him, holding his hand ... Assure the family that the patient is not suffering be empathentic.

State patient's death, inform family, identify the patient (ask for documents), inform family about next steps (correct procedure, funeral service, autopsy not indicated,...) - and do it empathetically, comprehensibly and repeatedly... Offer support ...

|   | Team scoring  | 1  | 2   | 3   | 4   | 5  | Max. points<br>1 300 | Correct decisions and performance   |
|---|---|--|---|---|---|--|----------------------|---|
| 1 | Introduction  | Introduction of<br>the crew  | Correct<br>communication,<br>anamnesis,<br>(only one to one<br>speaking)                | Acquire<br>patient's report   | Dg. terminal<br>stadium of lung<br>cancer     | Respecting<br>family   | 260                  | Peaceful approach to the family, getting all<br>important information, take and read out<br>patient repor, talking one to one, listen to<br>family, effort not to exclude family from the<br>situation.   |
|   |   | 10   | 100   | 50  | 50  | 50   |                      |   |
| 2 | Primary and secondary<br>examination                            | Prim.survey  | Sec.survey  | EKG:<br>agon. rythmus   | Contact<br>oncologist                         |  | 190                  | Evaluate the clinical status, provide primary<br>survey, (ABCDE), provide secondary survey,<br>support family and give them information they<br>want to knoow, be empathentic, contact<br>oncologist, assure family, that he is not<br>suffering (poits are given in therapy part).   |
|   |   | 100  | 50  | 20  | 20  |  |                      |   |
| 3 | Therapy   | Do not start<br>CPR<br>(200)<br>if CPR in<br>progress -<br>stopping just Dg<br>is known<br>(150) | Right<br>supporting<br>patient and his<br>family during<br>dying                        | Monitoring  | State death and<br>state the time of<br>death | Inform family  | 410                  | Not to initiate CPR, if CPR already initiated,<br>stop after past medical history has been taken.<br>If CPR continues from any reason, then 0<br>points will be given. Support family during<br>treatment and good communication with them -<br>they did well - best for him, he died at home<br>without pain, with family<br>Monitoring of the patient and state death,<br>inform family, state the time of death. |
|   |   | 200  | 100   | 30  | 50  | 30   |                      |   |
| 4 | Next steps correct<br>procedure "death<br>management"           | Doccuments<br>40   | Comprehensibly<br>and repeatedly<br>inform about<br>correct<br>procedures               | Offer help  |   |  | 190                  | Identificate patient (ask for documents), inform<br>family, what to do now (correct procedure,<br>funeral service,) - and do it empathically,<br>comprehensibly and repeatedly Offer help<br>(phone number, psychologist, with covering<br>the body).   |
|   |   | 40   | 100   | 50  |   |  |                      |   |
| 5 | Team cooperation and communication                              | Clear and<br>obvious leader<br>of the crew   | The crew<br>communicates<br>as a team and<br>passes the<br>information to<br>the leader | The leader<br>receives and<br>responds to<br>information<br>from the crew | Managed and<br>controlled<br>patient handling | Communication<br>with the patient<br>and actors<br>(calm down<br>son)<br>20+40 | 100                  | Cooperation crew as a team, clearly acting in<br>a prominent leader of the crew.<br>Unambiguous and clear communication with<br>the judge (not repeated queries on the same<br>data /typical VS/), patients and other actors.<br>Imagine after the arrival, inform the patient<br>what we do, why we do it (taking off, testing,<br>transport).   |
|   |   | 20   | 20  | 20  | 20  | 20   |                      |   |
| 6 | Actors<br>(simulated patients, patient<br>relatives, witnesses, | Patient  | Partner   | Family  |   |  | 150                  | Subjective evaluation by actors according actor's rules.  |
|   | bystanders etc.)  | 50   | 50  | 50  |   |  |                      |   |

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|---------|---|
| 1 00000 |   |

Story get to team with instructions.

Story for team:

Time limit for task:

Dispatch centre received emergency call:

It is possible to deal with seemingly impossible, too. Rallye Rejviz is game and fun after all!

# Your task:

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abseil down - rewarded by points profit

- go down by stairs not rewarded by points
- jump down from balcony disqualification (heirs may continue in competition with half of the points earned)

# Situation:

Everything happen for the first time sometimes. We could be proud to what we have achieved. Overrun own dread is great success!

# Instruction for task:

Paramedics crew compete together with dispatcher.

| Г | Team scoring      | 1                     | 2                  | 2                  | 4                  | 5 | Max. points | Correct decisions and performance                                       |  |
|---|-------------------|-----------------------|--------------------|--------------------|--------------------|---|-------------|---|--|
|   | ream scoring      | 1                     | 2                  | 5                  | 4                  | 5 | 240         | correct decisions and performance                                       |  |
| 1 | Abseil            | 1st member of<br>crew | 2nd member of crew | 3rd member of crew | 4th member of crew |   | 240         | 240 Abseil down by firefighters assistance                              | Abseil down by firefighters assistance |
|   |                   | 120/80/60             | 120/80/60          | 80/60              | 60                 |   |             |   |  |
| 2 | By stairs         | 1st member of<br>crew | 2nd member of crew | 3rd member of crew | 4th member of crew |   |             | walk down by stairs with prior announcement to firefighters assistant   |  |
|   |                   | 0                     | 0                  | 0                  | 0                  |   |             |   |  |
| з | Jump from balcony | 1st member of crew    | 2nd member of crew | 3rd member of crew | 4th member of crew |   |             | qualification -<br>clusion from<br>jump down from balcony to the ground |  |
|   |                   | disqualification      | disqualification   | disqualification   | disqualification   |   | competition |   |  |

Crew with 3 members - 80 points per person. Crew with 4 members - 60 points per person...

Time of performance is not included to final evaluation but task should be finished by each team in 15 min.

| Prskavka             | Den | MUC. RR<br>NAT-RLP<br>NAT-RZP | Rozhodčí: | Noriyoshi Ohashi, Kateřina Nováková<br>Juraj Povinský, Zora Kurajská<br>Adriana Povinská, Danica Pompošová |
|----------------------|-----|-------------------------------|-----------|--|
| Sparkler             | Day | INT-PHYS<br>INT-PARA          | Judges:   | Noriyoshi Ohashi, Kateřina Nováková  |
| Time limit for task: |     | max. 12 mins                  |           |  |

# Story get to team with instructions.

# Story for team:

Emergency Dispatch Center received emergency call and send you to: The chaotic young man calls, that his mother are terribly unwell, she has high fever, cough, sputters and suffocates.

# 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.
- Known to the judge any further steps.

# Conditions on the scene:

Saturday May 24, 2014, 08:30am., clouds, no wind, 12°C (54°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

# Local situation:

- Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and А obstetric, CT, biochemistry.
- B Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, oncology, psychiatry, infectious diseases and pediatric dept.
- Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR. С
- Leave the patient on the place. D

# Mean of transport:

|   | Mean of transport:                          | Information   |
|---|---|---|
| Е | Helicopter rescue                           | Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. |
| F | Ground                                      | Team 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.                                   |
| I | 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:

The young man (19 years), dismissed of ability to legal acts, live alone with her mother. The woman's health suddenly worses. She has fever = 39.8 °C, sometimes she can't inhale, she badly respire, her head feels rotating, flickering in front of her eyes. She has irritative cough with expectoration. The respiration frequency is 22 breaths per min., SpO2=88-90%, BP 110/60, HF 124/min. From personal anamnesis and medicaments, for which the crew should actively ask or from inspection of hanky with bloody and pus smudges and clinical survey the crew may as fast as possible determine the correct diagnosis – active open pulmonary tuberculosis, or possibly septic pre-shock condition. Immediately secure personal protection of crew (facial mask, at least one gloves), prepare the patient for transport (venous line, oxygen inhalation therapy - 4-5 l/min., antithussicum, right position of patient - sitting or semi-sitting down).

The crew must tame oligofrenic son before transport, which obstruct the crew in transport preparation after finding that his mother will be carried away. The crew must ensure hospitality of his next destiny too, because he is dismissed of legal age and can't remain alone in hermitage.

Patient (mother): wheezes, iritative coughs, she is white-faced, haloned and red eyes, repeatedly notice that son is not sui juris. Son: oligofrenic (IQ of imbecile level), terrified, weepy, doezn't understand context. Chaoticaly runs around and obstruct the crew in maintaining of medical help. Assertive and friendly crew access leads to calm, aggressive approach escalating aggression son.

FA: combination of five basic drugs - streptomycin, isoniazid, rifampicin, pyrazinamide, ethambutol - ambulatory 3 times a week. Vital functions: TT = 39.8°C/103.5°F, HF = 124/ min., BF = 22/min., BP 110/60, SpO2 = 88-90%.

### Key words:

Pulmonary tuberculosis, septic pre-shock condition, personal protection of crew, non sui juris oligofrenic.

|   | Team scoring  | 1   | 2   | 3   | 4   | 5  | Max. points<br>1 300 | Correct decisions and performance   |
|---|---|---|---|---|---|--|----------------------|---|
| 1 | Evaluation of situation and determination of diagnosis  | Right dg. up to<br>2 mins<br>(100)<br>or<br>right dg. After<br>2 mins<br>(75)<br>100                                  | Bonus:<br>pre-shock<br>condition<br>diagnosis<br>50   |   |   |  | 150                  | Dg.: pulmonary tuberculosis + septic pre-<br>shock condition.   |
| 2 | Determination of working<br>diagnosis, evaluation of all<br>symptoms at place and<br>survey   | Personal<br>history+<br>knowledge of<br>medicaments at<br>place<br>60+60  | Evaluation of<br>pulmonary<br>hearing and<br>oxygenation<br>values.<br>30+30                  | BP+HF+temper<br>ature<br>30+30+30   | Hanky smudges<br>inspection                         |  | 330                  | Exhaustive clinical survey, control of vital<br>functions, make diagnosis of<br>sinusoidal tachycardia, marginal blood<br>pressure and hyposaturation (BP,<br>HF, SpO2, temperature, respiration, next<br>circumstantial evidence at place<br>credible support working diagnosis).  |
| 3 | Protection of crew in<br>contact with<br>infect disease   | 120<br>Gloves and<br>facial mask<br>before arrival to<br>place  | 60<br>Gloves and<br>facial mask<br>immediately<br>after<br>determination of<br>diagnosis      | 90<br>Gloves and<br>facial mask<br>after<br>examination<br>and<br>preparation of<br>patient | 60<br>Gloves or facial<br>mask<br>only              |  | 100                  | Immediately from call is already recognizable,<br>that there may be infect disease with aerosol<br>transfer. According to medicaments at place<br>there is diagnosis of infect disease almost<br>sure immediately after arrival.<br>Protection of crew has priority before survey<br>and treatment of patient, which has (although<br>marginally) maintained basic vital functions.                       |
| 4 | Therapy   | a) i.v. therapy   | 75<br>b) antitusikum  | c) oxygen<br>inhalation   | d) position   |  | 160                  | According to symptoms of beginning septic<br>shock there is necessary to secure enter into<br>blood circulation with any ion solution,<br>marginal respiration combined with respiration<br>alveolocapillar malfunction improve<br>by oxygen inhalation FiO2=3,6 to 4,0, i.e. 4-5<br>l/min. There is indicated antitussicum when<br>irritated cough and body position at sitting<br>down or semi-sitting. |
| 5 | Taming of son and<br>ensuring of his<br>next destiny: a) soothing<br>conversation b) detention<br>with<br>assistance of second crew<br>or police<br>c) sedation | 40<br>a) soothing<br>conversation<br>b) detention<br>with<br>assistance of<br>second crew or<br>police<br>c) sedation | 40<br>b) and c) only<br>140   | 40<br>b) only<br>70   | c) only   |  | 210                  | According to young man unability to legal acts,<br>there is not possible to leave him at place.<br>Soothing conversation hasn't effect, therefore<br>sedation and detention (best) with next<br>paramedic and possible policeman<br>accompaniment is recommended.<br>It takes place on Saturday, welfare<br>unavailable.  |
| 6 | Direction, transport  | Position at<br>sitting down or<br>semi-sitting<br>40  | B by F<br>35+35<br>70   |   |   |  | 110                  | The patient doesn't make any obstacles during<br>instruction about detention, she agree with<br>therapy in facility specialised to tuberculosis<br>therapy (infect disease or pulmonary clinic),<br>where diagnosis will be confirmed and next<br>possible routing will be secured.   |
| 7 | Team cooperation and communication  | Clear and<br>obvious leader<br>of the crew<br>20  | The crew<br>communicates<br>as a team and<br>passes the<br>information to<br>the Leader<br>20 | The leader<br>receives and<br>responds to<br>information<br>from the crew<br>20             | Managed and<br>controlled<br>patient handling<br>20 | Communication<br>with the patient<br>and actors<br>(calm down<br>son)<br>20+40<br>60 | 140                  | Cooperation crew as a team, clearly acting in<br>a prominent leader of the crew.<br>Unambiguous and clear communication with<br>the judge (not repeated queries on the same<br>data /typical VS/), patients and other actors.<br>Imagine after the arrival, inform the patient<br>what we do, why we do it (taking off, testing,<br>transport).   |
| 8 | Actors<br>(simulated patients, patient<br>relatives, witnesses,<br>bystanders etc.)   | Mother  | Son   |   |   |  | 100                  | Subjective evaluation by actors according actor's rules.  |
|   | ,,  | 50  | 50  |   | 1   |  |                      | 1   |

Additional questions judges important for proper evaluation: A - According to what has been diagnosed? B - How to solve the health and social situation of the son on the spot?

| Qakino               |     | MUC. RR      | Rozhodčí: | Kateřina Ningerová, Táňa Bulíková                    | RALLYE REJVÍZ 2014                   |
|----------------------|-----|--------------|-----------|--|--------------------------------------|
|                      | Den | NAT-RLP      |           | Kateřina Ningerová, Hana Vacková, Vlasta Vařeková    |                                      |
|                      |     | NAT-RZP      |           | Táňa Bulíková, Renáta Trajtelová, Ladislava Budíková |                                      |
| Qakino               | Day | INT-PHYS     | Judges:   | René Mezuljaník, Miroslava Marková, Tomáš Ninger     |                                      |
|                      |     | INT-PARA     | -         |  |                                      |
| Time limit for task: |     | max. 12 mins |           |  | Story get to team with instructions. |

### Story for team:

Emergency Dispatch Center received emergency call and send you to:

Mr. Karel Alberto is calling EMS to the flat of his friend Mr. Roman Quakino, who has just experienced weakness and confusion during Karel's visit.

#### 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.
- Known to the judge any further steps.

### Conditions on the scene:

May 23, 2014, 11:30am, clear, no wind, 20°C (68°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

| Direction Ground distance Depa |            |       | Departments  |
|--------------------------------|------------|-------|--|
| A                              | Hospital A | 8 km  | Biochemistry (and Haematology, the same for next hospitals), General Surgical Ward, Internal Medicine Ward and Neurology Ward  |
| в                              | Hospital B |       | Resuscitation Unit, CT Scanner, Biochemistry, Pediatric Ward and ICU, General Surgical Ward, Stroke Treatment ICU, Isolation (Infectious Diseases)<br>Unit, Internal Medicine Ward, Neurology Ward and ICU, ENT Ward, Psychiatry, Emergency  |
| с                              | Hospital C | 30 km | Resuscitation Unit, CT and MR Scanners, Biochemistry, Pediatric Ward and ICU, General Surgical Ward, Isolation Unit,Internal Medicine Ward, Acute<br>Coronary Syndrome Treatment Centre, Cerebrovascular Diseases Treatment Centre( higher level than Stroke Treatment Centre), Neurosurgery,<br>Neurology Ward and ICU, ENT Ward, Burns Treatment centre, Psychiatry, Traumacentre, Emergency |
| D                              | Home D     | 0 km  | Leave the patient on the place.  |

|   | Mean of transport                           | Information   |
|---|---|---|
| Е | Helicopter rescue                           | Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. |
| F | Ground                                      | Team 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.                                   |
| Т | Another                                     | Describe and justify to judge.  |

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

#### Situation on the scene:

After arrival:

The patient is sitting at the table, wide awake, breathing spontaneously, he understands conversation partially. He can not talk but understands, he carries out an order, cooperates, he gives a nod to simple question.

# Correct procedure (for details see table):

It is necessary to obtain full medical history (high blood pressure, ischaemic heart disease, MI, stroke, diabetes, operations/surgery, cancer), medicines taken (there is a slip of paper with written medication in his personal ID cards) and allergies. It is important to take a telephone number of his friend, who witnessed his health problem and also of his relatives (a slip of paper in his IDs with names (Kacenka, Jenik). You must ask about pain, palpitations, shortness of breath, nausea/vomitus, fever.

Clinical status upon arrival: regular, palpable publics on a. radialis, regular heart rate, no murmurs. Breathing - symetrical air entry, alveolar, no pathological phenomenons. Abdomen is soft, no pain response to palpation, no palpable mass. Lower extremities with no oedemas, no signs of DVT.

Neurological assessment (FAST): expressive aphasia (he can not talk but he understands, can nod yes-no responses nonverbally), isomiotic pupils 2/2mm constricting to light, ocular movements are normal, decreased teeth showing on the right side, tongue is put out in medial line, no tenderness and normal movements of cervical spine. Upper extremities: Mingazzini test: slow fall on the right side, weak R hand squeeze, hit test normal. Lower extremities: Mingazzini test with no fall, wide stance, needs a help to walk but no signs of

Upper extremities: Mingazzini test: slow fall on the right side, weak R hand squeeze, hit test normal. Lower extremities: Mingazzini test with no fall, wide stance, needs a help to walk but no signs of paralysis. There are right hemisensory loss and no signs of meningeal irritation.

RESUME: fully conscious patient with normal circulation, FAST: expressive aphasia, right faciobrachial hemiparesis with right hemisensory loss.

### Anamnesis:

 Personal data
 Roman Qakino, born on 17. 9. 1967, adress: Jilkova 219, Brno, Health Insurance Card VZP (111)

 Medical history
 He denies smoking or illicit drugs abuse, suffers from high blood pressure, no history of heart disease, no history of stroke, no cancer treatment, he had an inguinal hernia surgery in 2009.

 Medication
 Betaloc ZOK 50 - metoprolol, Prestance 5/5 - amlodipine and perindopril, Sortis 40 - atorvastatin, Pantoprazol 40, Furosemid (a slip of paper with written medication in his wallet). If questioned, he denies taking of furosemide nowadays.

 Allergy
 Iodine - patient had an intravenous urography and had a problem (it is necessary to think about principles of emergency imaging and focus the question to iv contrast agent).

 Recent health problem
 He suddenly started with confusion - words in improper relation, a strange, uncertain walk to the toilet, he says nonsenses. He had one pint of beer during 2 hours visit of his friend, he does not drink beer regurally. It happened about 30 minutes prior to EMS crew arrival. If asked (goal directed) he confirms chest pain and palpitations.

Family medical history

Not available

| Vital signs               | After arrival | During task<br>(3 mins after initiating monitoring)           |
|---------------------------|---------------|---|
| Patient                   | Р             | P   |
| Pulse (/min)              | 80            | cca 103 (irregular)   |
| Resp. ateF (/min)         | 13            | 16  |
| Capillary return time (s) | 1 (as seen)   | 1 (as seen)   |
| BP (mm Hg)                | 170/90        | 132/91  |
| SpO2 (%)                  | 97            | 95  |
| Glycaemia (mmol/l)        | 6,7           | 6,7   |
| Temperature (°C/°F)       | 36,8/98       | 36,8/98   |
| GCS                       |               | E4 V5 M6=15/E4 V4 M6=14                                       |
| ECG                       | Sinus         | Atrial fibrillation with fast (rapid) ventricular<br>response |

#### Key words:

Contempt for work of healthcare providers in the chain of stroke patient care results from insufficient and bad communication and absence of feedback. What are hospital admitting personnel missing and what are EMS Crew missing?

|          | Team scoring  | 1  | 2  | 3  | 4   | 5   | 6  | Max. points<br>1 300 | Correct decisions and performance   |
|----------|---|--|--|--|---|---|--|----------------------|---|
| 1        | Anamnesis   | Medical history:<br>1) high blood<br>pressure, 2)<br>IHD, 3) MI, 4)<br>stroke, 5)<br>diabetes, 6)<br>cancer, 7)<br>operations, 8)<br>head trauma<br>8x15 | Abuse:<br>1) alcohol<br>2) smoking<br>3) illicit drugs<br>3x10   | lodine Allergy   | A slip of paper<br>with meds and<br>allergy found<br>and checked:<br>1) medication,<br>2) recheck<br>informations, 3)<br>relatives phone<br>numbers<br>3x20 | Phone number,<br>contact to his<br>friend<br>(surname,<br>mobile phone<br>number)                           | Exact time<br>check of the<br>onset of<br>problems (30<br>minutes prior to<br>EMS arrival) | 370                  | Medical history at least in range written.  |
|          |   | 120  | 30   | 80   | 60  | 20  | 60   |                      |   |
| 2        | Examination, therapy  | Neurological<br>Assessment<br>(FAST):<br>1) right facial<br>nerve paralysis,<br>2) right upper<br>arm paresis, 3)<br>R hemisensory<br>loss<br>3x20       | BP, PR, SpO2,<br>blood sugar<br>level,<br>temperature<br>5x10  | Focused<br>questions<br>about:<br>1) chestpain, 2)<br>palpitation, 3)<br>headache<br>3x20                            | ECG sinus   | 1) Tachycardia<br>recognizing<br>2) Paroxysmal<br>AF identification<br>3) Iv access<br>3x20                 | Nauzea and<br>vomitus<br>questions<br>2x20   | 350                  | ECG monitoring is necessary during<br>transportation to catch and document AF<br>paroxysm - it is often the embolus from left<br>atrium that causes stroke. AF paroxysm can<br>be recorded at scene if ECG monitor left on 3<br>minutes after connection. Iv access - the best<br>is green or wider cannula to be ready for<br>angiography.   |
|          |   | 60   | 50   | 60   | 80  | 60  | 40   |                      |   |
| 3        | Direction, diagnosis  | Direction<br>B or C  | Contact Stroke<br>or<br>Cerebrovascula<br>r Treatment<br>Centre by<br>recorded phone<br>call via<br>emergency<br>number (EMS<br>Dispatch<br>Centre) - 50<br>or<br>directly from<br>your phone - 25 | 1) Expressive<br>aphasia<br>2) Mild right<br>faciobrachial<br>hemiparesis<br>3) Right<br>hemisensory<br>loss<br>3x30 | Highlight the<br>information<br>about iodine<br>allergy when<br>talking to the<br>Stroke<br>Treatment<br>Centre staff                                       | Highlight the<br>information<br>about AF<br>paroxysm when<br>talking to Stroke<br>Treatment<br>Centre staff | Correct<br>Glasgow Coma<br>Scale scoring<br>(GCS)<br>E4 V5 M6=15<br>or<br>E4 V4 M6=14      | 270                  | Adequate and correct description of stroke<br>symptoms (triage positive) when talking to<br>Stroke Treatment Centre physician, it is<br>necessary to consult Neurologist throught<br>recorded phone call via EMS Dispatch Centre<br>to confirm triage positivity and agree with<br>admission and tell him all important<br>informations, especially possible iv contrast<br>agent allergy (angiography is anyway possible<br>but special caution is needed. The information<br>about allergy would not be possible to recheck<br>at the hospital due to neurological worsening<br>to global aphasia).<br>GCS - to be awarw what is checked - verbal<br>response can be checken nonverbally and<br>should be 4 or 5).<br>GCS to be told to the Neurologist on call or he<br>will ask EMS staff about that. |
| _        |   | 30   | 50   | 90   | 40  | 40  | 20   |                      |   |
| 4        | Preparation for transport,<br>transport   | Pt must be<br>ready for<br>transport with<br>established<br>ECG monitoring<br>and adequate<br>iv. access<br>25   | Transport<br>F<br>25   |  |   |   |  | 50                   | Stroke Triage positive patient suffers from at<br>least one primary "main" symptom or at least<br>two secondary symptoms of acute stroke within<br>24 hours (clinical point of view) including fully<br>improved symptoms - transitory ischaemia<br>(time point of view). ECG to be monitored in<br>the course of transport - see above).   |
| $\vdash$ |   | 20   | 20   | DAG  |   |   |  |                      |   |
| 5        | Diagnostic and therapeutic reasoning  | Stroke   | PHYS:<br>Atrial Fibrillation<br>AF   | PARA:<br>Atrial Fibrillation<br>AF or Narrow<br>QRS Complex<br>Tachycardia   |   |   |  | 60                   | Right diagnostic and treatment decision making.   |
|          |   | 30   | 30   | 30   |   |   |  |                      |   |
| 6        | Team cooperation and communication  | Clear and<br>obvious leader<br>of the crew   | The crew<br>communicates<br>as a team and<br>passes the<br>information to<br>the Leader  | the crew   | Managed and<br>controlled<br>patient handling   |   |  | 100                  | Cooperation crew as a team, clearly acting in a<br>prominent leader of the crew.<br>Unambiguous and clear communication with<br>the judge (not repeated queries on the same<br>data /typical VS/), patients and other actors.<br>Imagine after the arrival, inform the patient<br>what we do, why we do it (taking off, testing,<br>transport).   |
|          |   | 20   | 20   | 20   | 20  | 20  |  |                      |   |
| 7        | Actors<br>(simulated patients, patient<br>relatives, witnesses,<br>bystanders etc.) |  | Friend   |  |   |   |  | 100                  | Subjective evaluation by actors according<br>actor's rules.   |
| L        | . ,   | 50   | 50   |  |   | l   | l  |                      |   |

| Vemeno               |     | MUC. RR      | Rozhodčí: | Zdeněk Tlustý, Eva Litvíková     |
|----------------------|-----|--------------|-----------|----------------------------------|
|                      | Den | NAT-RLP      |           | Zdeněk Tlustý, Klára Střelečková |
|                      |     | NAT-RZP      |           | Katarína Veselá, Eva Litvíková   |
| Teat                 | Day | INT-PHYS     | Judges:   | Veronika Matušková, Jan Veselý   |
|                      |     | INT-PARA     |           |                                  |
| Time limit for task: |     | max. 12 mins |           |                                  |
|                      |     |              |           |                                  |

### Story get to team with instructions.

# Story for team:

Emergency Dispatch Center received emergency call and send you to: The man, about 30 years, jumped head first into the pool and screaming in pain.

# 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.
- Known to the judge any further steps.

# Conditions on the scene:

May 23, 2014, 10:30am, clear, no wind, 22°C (72°F). Call to address time is 15 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

# 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, oncology, 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.

# Mean of transport:

### Information

 E
 Helicopter rescue
 Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible.

 F
 Ground
 Team own ambulance.

 G
 Ground - next ambulance with paramedic crew
 Arrival 15 mins. after request through Emergency Dispatch Center.

 H
 Ground - next ambulance with physician crew
 Arrival 15 mins. after request through Emergency Dispatch Center.

 I
 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:

A man about 30 years old, slightly drunk, as well as his girlfriend. She's also very agitated. He ran and jumped headfirst into the swimming pool, but there was no water. He's now lying on his abdomen, head turned to the side. He's screaming in pain, the most painful area is on the neck. He can't move with lower limbs, upper limbs are poorly movable and strongly tingling. You are able to pacify the girlfriend, than she's calmer and on your request also helpful.

Men's medical history: healthy, with no treated disease, he does not take any medication, allergy on penicillin.

Obj .: Pale, anxious, short of breath when communicating, looking diaphragmatic breathing, auscultation - bilaterally clean breathing, so signs of heart failure, heartbeats regular 50/min, without murmurs. Chest, abdomen and extremities without pathology.

Neurologically: lower limbs - complete plegia, upper limb - severe arm paresis, plegia below, parestesia, below the collarbone numbness. No evidence of concussion.

ECG: regular sinus bradycardia 50/min, or physiological curve.

Measured parameters: BP 75/40 mmHg, AS 50/min, SpO2 85 %, respiratory rate 24/min, temperature 36.0 C, glucose 6.2 mmol / L.

### Procedure:

a) Asessment of situation on site, communication with patient's girfriend and camling her down, estimation of injury severity, activation of air transportation within 2 minutes - prevention of delay.

b) ABCD, with emphasis on correct cervical collar application, right and delicate manipulation with patient.

c) Basic secondary survay, diagnosis: 1. spinal cord trauma 2. spinal shock

Therapy (is accepted):

1. Securing i.v. line 1 x, G20 or thicker, infusion at least 500 ml of krystaliod fluid, administration of oxygen by simple mask at least 2l/min.

2. No administration of corticosteroids - according to actual valid EBM recomendations.

3. Administration of analgosedation considering drunkness. Overdose leads to respiratory depression subsequentely decrease of oxygenation and perfusion. Inappropriate choice means unnecessary suffering so harm of the patient = points reduction.

4. All manipulation with patient has to be controlled. There has to be clear teamleader who organise whole team cooperation and also patients girlfriend on case site. All communication has to be delicate with regard to patient's severe diagnose and prognoses.

### Key words:

Cervical spine trauma, spinal shock, ATLS, technique of cervical collar application and manipulation with patient, team leader.

|     | Team scoring  | 1  | 2   | 3   | 4   | 5  | Max. points<br>1 300 | Correct decisions and performance   |
|-----|---|--|---|---|---|--|----------------------|---|
| 1   | Patient history   | Minimal<br>personal data                                       | Medication  | Allergies   |   |  | 90                   | At least basic medical history, especially allergies (!).   |
|     |   | 30   | 20  | 40  |   |  |                      |   |
| 2   | ABCD  | А  | В   | С   | D   |  | 80                   | Primary survey acording to ATLS.  |
|     |   | 20   | 20  | 20  | 20  |  |                      |   |
| 3   | Therapy   | I.v. line,<br>crystaloid fluids<br>min. 500 ml                 | Analgesia<br>optimal<br>(100)<br>or problematic<br>(25)                                 | O2 by oxygen<br>mask 2l/min   | Respecting<br>EBM   |  | 200                  | Basic secure considering hypotension,<br>analgesia considering drunkenness.<br>Optimal: Sufenta 5-10 ug/Fentanyl/Morphin in<br>equiv. doses/Ketamin 0,25-0,5 mg/kg i.v. (i.o.).<br>Dispoutable: insufficient dose/overdose,<br>another analgetics or way of administration<br>(see above).<br>Respecting actual EBM principles (no<br>corticosteroids administration etrc.)   |
|     |   | 25   | 100   | 50  | 25  |  |                      |   |
| 4   | Diagnosis   | Cervical spine<br>injury                                       | Right lesion localisation   | Spinal shock  |   |  | 200                  | Cervical spine injury, clasification on injury -<br>approx. C5-C8 or "below brachial plexus",<br>slinal shock.  |
|     |   | 100  | 50  | 50  |   |  |                      |   |
| 5   | Technics  | Cervilac collar application                                    | Safe logrolling,<br>using<br>spineboard,<br>scoop                                       | Prevention of C-<br>spine<br>movements                                    | Immobilization  |  | 325                  | Right technique of cervical collar application,<br>relocation on stretcher with no potential harm<br>of patient. Optimal is use od spineboardu,<br>scoop, head immobilisation etc.  |
|     |   | 100  | 100   | 75  | 50  |  |                      |   |
| 6   | Direction, transport  | Request for air<br>transportation<br>within first 2<br>minutes | C by E  | C by F  |   |  | 125                  | Right direction - trauma center via HEMS<br>(rapid and delicate).   |
|     |   | 25   | 100   | 25  |   |  |                      |   |
| 7   | Team cooperation and communication                              | Clear and<br>obvious leader<br>of the crew                     | The crew<br>communicates<br>as a team and<br>passes the<br>information to<br>the Leader | The leader<br>receives and<br>responds to<br>information<br>from the crew | 1) Managed<br>and controlled<br>patient handling<br>2) Involvement<br>of partners in<br>handling<br>10+10 | Communication<br>with the patient<br>and actors<br>(master's<br>reactions,<br>appropriate<br>form of patient<br>information) | 120                  | Cooperation crew as a team, clearly acting in<br>a prominent leader of the crew.<br>Unambiguous and clear communication with<br>the judge (not repeated queries on the same<br>data /typical VS/), patients and other actors.<br>Imagine after the arrival, inform the patient<br>what we do, why we do it (taking off, testing,<br>transport).<br>Zvládnutí vlastní posádky i partnera,<br>komunikces u paciente so závožneu do  |
|     |   | 20   | 20  | 20  | 20  | 40   |                      | komunikace u pacienta se závažnou dg.   |
| 8   | Artistic impression   | A: Logical and<br>organised work                               | B: Right<br>administration<br>of infusions and<br>drugs                                 | C: Technique of<br>work with<br>scoop/spineboa<br>rd                      |   |  | 60                   | A: Like in real situation, logic subsequent<br>actions, prevention of patient harm (do first<br>what is not painful and possible to do when<br>patien is lying on his abdomen, than i.v. line<br>and i.v. analgesia, logroll - directly on scoop+<br>cervical collar, subsequent examination and<br>treatement).<br>B: Infusion, lying on the ground is not working -<br>someone has to hold it or hang it somewhere!<br>C: Scoop - right length, connection, disconect<br>without force. Spineboard - minimal tilting,<br>secure with sidewalls. |
|     |   | 20   | 20  | 20  |   |  |                      |   |
| 9   | Actors<br>(simulated patients, patient<br>relatives, witnesses, | Patient  | Partner   |   |   |  | 100                  | Subjective evaluation by actors according actor's rules.  |
| I I | bystanders etc.)  | 75   | 25  |   |   |  |                      |   |

| Volba                |       | MUC. RR      | Rozhodčí: | Francis Mencl, Miroslav Ptáček | RALLYE REJVÍZ 2014                     |
|----------------------|-------|--------------|-----------|--------------------------------|--|
|                      | Noc   | NAT-RLP      |           | Tomáš Vaňatka, Miroslav Ptáček |  |
|                      |       | NAT-RZP      |           | Denisa Osinová, Karel Žatecký  |  |
| Choice               | Night | INT-PHYS     | Judges:   | Francis Mencl, Radana Tichá    |  |
|                      |       | INT-PARA     |           | Dan Celik, Tomáš Beran         |  |
| Time limit for task: |       | max. 10 mins |           |                                | Story given to team with instructions. |

Storv for team:

Emergency Dispatch Center received an emergency call and sends you to: Depressed man threatening to jump off a roof. Police on site.

# Your tasks:

- Assess the scene.
- Identify and examine the patient(s).
- Establish a working differential diagnosis and identify life threats.
- Treat the patient(s).
- If hospitalization is needed, identify destination and optimal mode of transportation

# Conditions on the scene:

May 24, 2014, 1:30am, clear sky, calm, temperature 10°C (50°F). Call to address time is 5 mins. All requests and information towards Emergency Dispatch Center should be directed to judge marked as DISPATCHER.

# Medical facilities:

- Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and obstetric, Α CT biochemistry
- Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, psychiatry, infectious diseases and pediatric dept. в

Team own ambulance.

- 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.

# Mode of transport:

E Helicopter rescue

- F Ground
- Ground next ambulance with paramedic crew
- H Ground next ambulance with physician crew
- Another I.

Arrival 15 mins after request through Emergency Dispatch Center. Arrival 15 mins after request through Emergency Dispatch Center. Describe and justify to judge.

Information Arrival 15 mins after request through Emergency Dispatch Center. Landing on the scene is possible.

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

# Situation at the scene:

Upon arrival the police inform you that the man just jumped (or fell!). They found a needle and syringe nearby. They know him - he suffers depression and abuses drugs. Patient unresponsive with a severally bleeding leg, a respiratory rate of 8, heart rate of 70 (blood pressure initially 100/65 - a combination of blood loss and heroin effect). Within 1 minute of arrival it will be 80/50 and untreated within 2 minutes it will be 70/30. Oxygen saturations will drop too.

Bleeding should be addressed first and then airway and/or reverse overdose. The bleeding is not controlled with pressure, requires a tourniquet. If the naloxone is given too quickly and/or in too large a dose patient will respond violently. This results in increased bleeding and if intubated the tube being pulled out. Initially primary and secondary exams show no other major abnormality. However he has internal injuries and he starts, or continues, to deteriorate further. He must be reexamined!

Resuscitation should be using principles of permissive hypotension. If ambulances carry blood/plasma that can be given as well.

# Critical actions:

Immediate tourniquet (recognition of the greater life threat). Primary and secondary exam (suspecting internal injury from mechanism). Consideration for neck and back injury and proper immobilization. Oxygenation & ventilation - controlled reversal of respiratory depression (heroin overdose). Fluid/blood resuscitation - permissive hypotension.

# Physical examination:

Initial BP 100/65, 70, 8, pulse ox 89%, unresponsive Pulsating extremity hemorrhage, not controlled with pressure Breathing shallow, lungs clear

Radial pulse weak

The remainder of the exam shows no obvious injury (no hematoma, no abrasions etc)

Abdomen is soft (he is sedated), pelvis is stable

Pupils are pinpoint, nonreactive to light

# Goal of task:

1) Importance of hemorrhage control (CAB - circulation, airway, breathing) tourniquet application

- 2) Recognition and reversal of opioid (heroin) overdose, airway management & proper technique
- 3) Importance of reassessment and recognition of ongoing problems (internal bleeding)
- 4) Permissive hypotension in resuscitation from hemorrhagic shock

|          | Team scoring  | 1   | 2  | 3  | 4  | 5  | Max. points | Correct decisions and performance  |
|----------|---|---|--|--|--|--|-------------|--|
|          | ,<br>,  |   |  |  |  |  | 1 300       |  |
| 1        | Scene   | Quick scene<br>size up, scene<br>safety   | Identifying and<br>seeking out<br>police officer               |  |  |  | 50          | Organized approach to the scene, situation<br>evaluation, identifying police as potential<br>historian & assistant well as for crowd control.  |
| <u> </u> |   | 25  | 25   |  |  |  |             |  |
| 2        | Identification of immediate<br>life threat & hemmorhage<br>control                  | Immediate<br>tourniquet<br>application  | Slight delay (eg<br>to take a quick<br>pulse check, BP<br>etc) | Pressure<br>dressing(s)<br>applied   | Tourniquet<br>applied after<br>pressure<br>dressings fail                          |  | 175         | Recogniton of life threatening hemorrhage.<br>Tourniquet applied immediately. Team allowed<br>to check for pulse and BP but with minimal<br>delay and with someone applying pressure to<br>the wound. Delays for airway management and<br>especially failure to apply pressure and or<br>tourniquet will cost the team points.   |
|          |   | 175   | 150  | 100  | 50   |  |             |  |
| 3        | Airway management   | Supplemental oxygen   | BVM<br>ventilations  | Using pulse ox<br>and/or<br>capnography to<br>guide<br>ventilations and<br>treatment | Advanced<br>airway after<br>hemorrhage<br>control                                  | Advanced<br>airway before<br>hemorrhage<br>control                     | 200         | Recognition of respiratory depression and<br>inadequate oxygenation. Supplemental oxygen<br>and BVM ventilation is adequate. Respiratory<br>depression will reverse with a small amount of<br>naloxone. Intubation not required. If intubated<br>do not reverse opioid.  |
| -        |   | 50  | 75   | 50   | 25   | 10   |             |  |
| 4        | Consideration for orthopedic/spine injuries   | CC<br>Immobilization<br>50  | Spinal<br>immobilization<br>50                                 |  |  |  | 100         | There are no head or spine injuries in this<br>patient however the mechanism is suspicious<br>and because of his diminished level of<br>consciousness it cannot be ruled out.  |
|          |   |   |  |  |  |  |             | Permissive hypotension is preferred.   |
| 5        | Blood pressure and managment of shock   | 2 IV lines bolus<br>to SBP of 80-90   | TXA given  | Blood<br>products/plasm<br>a write in type   |  |  | 200         | Aggressive fluid administration worsens<br>bleeding and results in dilation of coagulation<br>factors and worsens outcome. TXA (tranexamic<br>acid) and blood products preferred. Permissive<br>hypotension is preferred.  |
| <u> </u> |   | 150   | 25   | 25   |  |  |             |  |
| 6        | Management of opioid<br>overdose  | Recognition<br>(respiratory<br>depression,<br>pinpoint pupils)<br>vs admin for<br>decreased<br>responsiveness | Titrated<br>nalaxone   |  | Circle route of<br>adminstration:<br>intranasal route<br>IV                        | Check if<br>Nalaxone<br>administered<br>following<br>intubation        | 100         | The goal of opioid reversal is reversal of<br>respiratory depression, not full<br>awakening/withdrawal. This is best<br>accomplished by titrated doses of naloxone. At<br>any rate following intubation it should be<br>avoided.<br>Naloxone: 0,4 mg repeat x 1  |
|          |   | 50  | 50   |  |  |  |             | Naloxofie. 0,4 mg repeat x 1   |
| 7        | Reassessment &<br>recognition of ongoing<br>internal blood loss                     | Unprompted<br>reassessment  | Prompted (eg<br>by changing<br>vital signs etc)                | Recognition of<br>ongoing blood<br>loss  | IVF boluses<br>only to maintain<br>SBP 80-90                                       |  | 175         | Reassessment is crucial as is the recogniton of<br>ongoing internal hemmorhage. Avoid excessive<br>fluid administration. If TXA (tranexamic acid)<br>and/or blood products available and have not<br>been started yet now is the time.   |
|          |   | 100   | 25   | 50   | 25   |  |             |  |
| 8        | Direction & transport<br>decision   | Helicopter<br>decision to<br>transport in<br><5 mins  | Helicopter<br>decision to<br>transport in<br>>5 mins           | C - Trauma<br>Center decision<br>to transport in<br><5 mins                          | C - Trauma<br>Center decision<br>to transport in<br>>5 mins                        |  | 100         | Teams should quickly recognize this is a major<br>trauma and activate helicopter services as<br>soon as possible   |
| ┣_       |   | 50  | 25   | 50   | 25   |  |             |  |
| 9        | Team cooperation and communication  | Clear and<br>obvious<br>leadership  | Good team<br>communication                                     | The leader<br>receives and<br>responds to<br>crew<br>information                     | Coordinated<br>patient care,<br>team members<br>know and<br>perform their<br>tasks | Good<br>communication<br>with the victim,<br>bystanders,<br>family etc | 100         | There is a leader who directs the team,<br>delegates tasks and overseas the scene, and is<br>receptive to feedback from the others.<br>The team is receptive to the leader's direction<br>but unafraid to question him when needed.<br>Orders are repeated back as they are received<br>and completed<br>There is respect among team members and a<br>willingness to help each other.<br>The patient is treated with respect, their privacy<br>and concerns are addressed and explanations |
| ⊢        |   | 20  | 20   | 20   | 20   | 20   |             | provided.  |
| 10       | Actors<br>(simulated patients, patient<br>relatives, witnesses,<br>bystanders etc.) | Patient   | Policeman  |  |  |  | 100         | Subjective evaluation by actors according actor's rules.   |
| L        | -   | 80  | 20   |  |  |  |             |  |

| ; Zámek              |     | MUC. RR      | Rozhodčí: | Silvia Trnovská, Dagmar Majerová, Roman Remeš   | RALLYE REJVÍZ 2014                   |
|----------------------|-----|--------------|-----------|---|--------------------------------------|
|                      | Den | NAT-RLP      |           | Silvia Trnovská, Dagmar Majerová, Ľubomír Hudák |                                      |
|                      |     | NAT-RZP      |           | Roman Remeš, Ludovít Priecel, Martin Šarišský   |                                      |
| Castle               | Day | INT-PHYS     | Judges:   | Sara Lary, Emel Bozkurt, Ahmet Ozkan            |                                      |
|                      |     | INT-PARA     |           |   |                                      |
| Time limit for task: |     | max. 15 mins |           |   | Story get to team with instructions. |

### Story for team:

Emergency Dispatch Center received emergency call and send you to:

In a decaying chateau, which was resided by homeless people, broke a fire. There are firefighters at the place who located the fire and extinguished it. Ventilation of the place is going on. There is an unindentified number of people inside the building. You are the first crew at the place.

# 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).
- Known to the judge any further steps.

### Conditions on the scene:

May 23, 2014, 07:30am., clouds, no wind, 12°C (54°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

### Local situation:

- A Nearest hospital: 20 km by ground transport. Depts: surgery, medical ward, gynecology and maternity departement, CT, biochemical laboratory.
- Higher level hospital: 42 km by ground transport. Depts: as A + emergency departement. ENT, oncology, psychiatry, department of infectious diseases and of children's care with B IMC (intermediate care).
- C Specialized centre: 55 km by ground transport. Depts: as B + trauma center, departement for burns, cardio center, stroke unit, magnetic resonance, paediatrics clinic with ICU. D Leave the patient on the place.

|   | Mean of transport:                          | Information   |
|---|---|---|
| Е | Helicopter rescue                           | Not available.  |
| F | Ground                                      | Team 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:

In a decaying chateau, which was resided by homeless people, broke a fire. There are firefighters at the place who located the fire and extinguished it. Ventilation of the building is going on, the firefighters are searching the rest of the chateau where there was no fire. When the crew comes, the commander of the firefighters provides basic information the fire extinguished, evacuation of the place is going on, ventilation as well, sorting according to START has taken place - 8 people at the place, 6 x black, 2 x red. The place, where they are, is safe now. When the crew comes to room, the procedures in the way of massive accident are going on - retriage through crew. After retriage's ending (aprox. after 1 min) is firefighter coming with adult patient. He has found him in one of the alcoves where there hasn't been any fire. An adult (P1) is probably under the influence of alcohol, he is burnt on his arms and hands, the burns of I and II level, he is holding a blanket in his hands, he doesn't want to let it go. After some time of persuading, he is handing the blanket over - a baby is wrapped in the cover - a newborn (P2) - the age is determined according to the umbilical cord - approximately five days. The baby is pale, hypoventilates, hert action present 85/min.

### Priorities:

1) Retriage: sorting took place according to START, realization of retriage is necessary - categorization - 8 patients - black.

2) P1 - priorities: commication, ABCD, analgesia, covering the burns, oxygen, transport.
3) P2 - ABCD, 5 x inflation breaths, effective ventilation, termo-plastic wrap, monitoring the vital functions, transport. In context of change the exit way (5 minutes to ambulance), is necessary to realize the assessments and treatments on the scene place, but on the other side consider the possibility of danger - only really essential medical acts must be done and definite treatment takes place in vehicle. Transport to vehicle is demonstrated after judge's instruction (in 9th min).

4) Communication with MOC goes on dynamically - more casualties accident, the situation is changing in the time - only 2 injured persons, proposal to cancelling the truma plan, request for 1 PARA/PHYS team. In 9th min comes the information about acute danger - immediate transport.

Emphasis is put on: communication, organization of work, observation of work of teamleader (TL) and his team.

# Physical examination:

Patient P1 (adult): GCS 15, lightly confused - stress reaction, BF 25/min, HF 115/min, BP 140/80 mmHg, SpO2 86%, capillary refill <2 sec. Iso pupils, fotoreaction norm, clear breathing, without stridor, burns on both arms and hands - approximately 4%, of I and partly of II level, strong pain of arms and hands, no foeter ethylicus. Patient P2 (newborn): the state of consciousness - according to AVPU - "P" BF 8/min (the best option is to determine it in an auscultatory way), BP unmeasureable, peripheral pulse impalpable (a. brachialis, a. femoralis), SpO2 unmeasureable peripherically, on auricle under 65%, capillary refill cannot be evaluate, temperature 35,1 C, skin - pale, breathing is shallow, breath efforts. Age: 5 days, slightly hypotrophic, no burns.

Patients P3 - P10: after retriage - category black - death (exitus letalis) from burns (charred) + asphyxiation.

|   | Team scoring  | 1  | 2  | 3   | 4               | 5   | Max. points<br>3 900 | Correct decisions and performance   |
|---|---|--|--|---|-----------------|---|----------------------|---|
| 1 | Organization of work<br>(steps are evaluated in<br>chronology!) | Communication<br>with the scene<br>commander<br>(firefighter) +<br>finding out of<br>START | Communication<br>with medical<br>operation<br>center | Priorities +<br>delegation of<br>the tasks by the<br>teamleader | Retriage - Crew | Decision of the<br>teamleader of<br>the examination<br>extention and<br>treatment | 370                  | <ol> <li>The commander of firefighters - an<br/>accident,possible danger, number of crews,<br/>number of injured/triaged patients,triage in the<br/>way of START - firefighters.</li> <li>Mediacal Operaton Center - a place, an<br/>accident, accessibility, number of injured,<br/>presence of rescue teams (Firefighters, EMS,<br/>Police), safety measures for rescue teams</li> <li>Team safety + dividing of team: retriage //<br/>record // basic acts.</li> <li>An advance in the way of more casualties<br/>accident, retriage through team, 8 patients -<br/>category - death.</li> <li>The situation's change - 2 patients have<br/>been founded, immediate decision about<br/>assesement and treatment - only basic acts, in<br/>the considering of potentional danger (crew is<br/>being warned from firefighter about safety<br/>situation's changes). The instruction about<br/>act's extent needs to be given clearly by the<br/>teamleader.</li> </ol> |
|   |   | 10   | 50   | 60  | 150             | 100   |                      |   |

|   | Organization of work<br>(the steps are evaluated in<br>chronological order)<br>parts 1/5, 2/1,2/ 2 are<br>going on simultaneously! | Dividing<br>patients P1 and<br>P2 by<br>teamleader<br>60                          | Information for<br>the teamleader<br>of the P1 state<br>+ treatment<br>consultation | Individual work<br>of the<br>teamleader with<br>newborn<br>160  | Communication<br>with medical<br>operation<br>center  | Efficiency vs.<br>invested energy<br>250                                   | 730 | paramedic, P2 - teamleader, with MOC<br>communicates other team member<br>2) Treatment of P1 - ABCD, providing<br>information to the teamleader<br>3) TL - independence - he needs to manage<br>P2 on his own, simultaneously coordinates<br>work of others<br>4) Communication with medical operation<br>center - stating the number of patients,<br>request for one PHYS/PARA team<br>5) Accurate, timed, coordinated, highly<br>effective, absolutely purposeful used energy,<br>no purposeless movements (e.g. purposeful<br>placing of equipment, they take only the most<br>necessary stuff from their suitcase, they do not<br>run among the patients, they know who is who<br>and who does what, etc)  |
|---|--|---|---|---|---|--|-----|--|
|   |  |   |   |   |   |  |     | 1) Clear, effective, few words, quick  |
| 3 | Evaluation of the team   | Communication inside the team   | Communication<br>with the patient<br>and the others<br>(firefighters)               | Cohesion of the<br>team + trust   | Team's<br>technique at<br>collecting<br>informations +<br>consensus   | Team member<br>participation at<br>fulfilling the task                     | 790 | <ol> <li>Joical, click, ice words, data<br/>understanding among team members.</li> <li>Polite, non-conflicting, empathic.</li> <li>Sharing the mental processes, trust - e.g.<br/>leaders trusts in relevance of information from<br/>paramedic.</li> <li>Informations need to go to the teamleader<br/>and the communication among team members<br/>going on at the same time, evaluation of the<br/>situation.</li> <li>50% - the teamleader, others 25%, activities<br/>need to be balanced (not everything is done<br/>by one member, other team members do not<br/>work only on commands as well).</li> </ol>   |
|   |  | 150   | 240   | 100   | 150   | 150  |     | , ,  |
| 4 | Evaluation of the teamleader   | Determination<br>of the priorities<br>and work<br>delegacy                        | Responsibility<br>for the rest of<br>the members,<br>risk evaluation,<br>safety     | Ability of<br>situational and<br>operational<br>management at<br>the situation<br>change  | Independent<br>fulfilling of his<br>part of the task  | Consultating<br>support to other<br>team members                           | 770 | <ol> <li>Clear recognition of decision and<br/>management by the teamleader, analysis and<br/>evaluation of informations.</li> <li>Teamleader realizes his responsibility,<br/>drawing attention on a possible risk, instructs<br/>the members, the situation has sudden<br/>changed in 9. minute, obvious danger, prompt<br/>decision about leaving the scene with<br/>appropriate equipment.</li> <li>Prompt reaction at the change of the<br/>situation, a high level of attention, situational<br/>management focused on the indvididual<br/>teammembers.</li> <li>Able independently fulfil the medical part of<br/>the task (despite various openings -<br/>consultations, situation analysis), is being<br/>evaluated according to P2-ventilation (is not<br/>interrupt, when TL should manage other<br/>problem).</li> <li>Despite his own work, he is able to consult<br/>other team members, i.e. it does not disturb<br/>the teamleader.</li> </ol> |
| _ |  | 150   | 120   | 200   | 200   | 100  |     |  |
| 5 | Assesement   | P3-P10:<br>retriage<br>(8 x death),<br>a list<br>8x10<br>80                       | P1:<br>ABCD<br>GCS+BF+HR+<br>BP+SpO2+Cap.<br>refill<br>7x10<br>70                   | hands and arms  | P2:<br>ABCD<br>AVPU+BF+HR+<br>BP+SpO2+temp<br>erature+ without<br>burns<br>7x10<br>70                         | P2:<br>Mature infant,<br>slightly<br>hypotrophic<br>2x10<br>20             | 270 | 1) Retriage - usage of the cards is not<br>necessary, list of numbers, result: 8 x death<br>2) GCS 15, BF 25/min, HR<br>115/min, BP 140/80 mmHg, SpO2 86%,<br>capilary refill <2 sec. 4)<br>The state of consciousness - according to<br>AVPU - "P" BF 8/min (the best option is to<br>determine it in an auscultatory way), BP<br>unmeasureable, peripheral pulse impalpable<br>(a. brachialis, a. femoralis), SpO2<br>unmeasureable peripherally on auricle<br>under 65 %, capillary refill cannot be evaluate,<br>temperature 35,1 C, skin - pale, breathing is<br>shallow, breath efforts  |
|   |  |   |   |   |   | 20   |     |  |
| 6 | Treatment (priorities) +<br>diagnoses  | P3-P10:<br>Without<br>treatment, dg.:<br>carbonized +<br>asphyxiation<br>30+60+30 | P1:<br>O2 + analgesia<br>+ covering the<br>burns<br>15+30+15                        | P1:<br>Burns on the<br>hands bilat. I<br>and II level - 4%<br>+ suspect<br>intoxication by<br>fire combustion<br>+ stress<br>reaction<br>60+30+30 | P2:<br>Efficient<br>ventilation +<br>thermo plastic<br>wrap +<br>reevaluation<br>vital functions<br>200+50+50 | P2:<br>Asfyxia +<br>suspect<br>intoxication of<br>fire combustion<br>60+30 | 690 | <ol> <li>Analgesia: sufentanil/fentanyl, ketamine +<br/>dormicum, we prefer i.m., i.n. oder usage of<br/>MAD, covering the burns - Waterjell.</li> <li>Iaying a baby on a underlayment, 5x<br/>inflation breaths, after breathing is SpO2 and<br/>HF increasing, it is necessary to take care of<br/>breathing the baby - as a system of a<br/>supportive ventilation is ambubag enough +<br/>Guidel airway, O2 up to 3/l, emphasis put on<br/>utility and effectivity of the ventilation - holding<br/>the mask, NO head over-reclination, NO<br/>pressure on a submental space, how goes on<br/>assessing the vital functions: skin colour, HR -<br/>phonendoscope stuck to the chest, rising the<br/>chest, continual monitoring, the aim SpO2<br/>over 90%</li> </ol>  |
|   |  | 120   | 60  | 120   | 300   | 90   |     | <u> </u>   |
| 7 | Direction, transport   | P3-P10:<br>Call coroner /<br>physician or<br>DVI team                             | P1:<br>PHYS: A via G<br>PARA: A via F<br>25+25                                      | P1:<br>Way of<br>transport from<br>the building   | P2:<br>Way of<br>transport from<br>the building:  | P2:<br>PHYS: C via F<br>PARA: C via H<br>25+25                             | 280 | <ol> <li>According to crew's national system</li> <li>Walking - escort by firefighter</li> <li>Exact team's coordination by the transport<br/>of P2</li> </ol>   |