3rd swiss trauma & Resuscitation Day

Summary

Prof. Dr. med. H. Zimmermann

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The ten commandments in trauma care ***(and NEW 11)***

Prof. Dr. A. Exadaktylos, Bern

Here are 5 (Look for the other 5 in the handouts)

- **Everythings starts with the ALPHABET**
- **Patients could die**
- **Learn from mistakes**

- **Trust no one..**
- **Courtesy and respect**

- **And 11) Communication , Teamwork (by BEAT SCHNÜRIGER)**

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The *obese trauma* patient: Special considerations and outcomes

Dr. L. Mica, Zürich

- **MORE complications: Thoracic / pulmonary (pneumonia)**
- **LESS pronounced: SIRS** (Sytemic Inflammatory Response Syndrome)
- **LESS infectious complications: FEMALES …**(and more: MALES)

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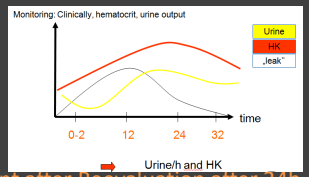
Initial evaluation and management of the *burn patient*

Dr. P. Ducommun, Zürich

- **Cooling not freezing**: Tap Water 12-16 °, max. 15 min
- **Top topics**
  - **Tetanus always**
  - **Antibiotics: never**
  - **No tannic antiseptics (e.g. Betadine)**



Peripherial Hospital:

ATLS principals

<10%: Debridement, Treatment after Reevaluation after 24h

>10-20%: Transfer to Center

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Femur shaft fracture in the multiply injured patient: Timing and technique of fixation

Prof. Dr. H. C. Pape, Aachen, Germany

- Early fixation if possible: Pelvis, femur, spine
- High risk patients: 40 % mortality
- Safe definitive surgery (SDS) > 80% (nailing), Damage control 20% (Fix Ext)
- CAVE: NISS>16, Temp<32°, Pl <95'000, Shock → Evidence level II
- In the discussion: „It depends on your system…"… and experienced surgeons at 3 o'clock in the morning?

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Current management of blunt solid abdominal organ injury

Prof. Dr. Andrew B. Peitzman, Pittsburgh, USA

- Bulk of trauma care provided by ED docs
- Trauma is a surgical disease….infrequently AND
- Metamorphosis over last 30 years: less invasive
- PAN CT is excellent: Missed injuries in 0.34%

BUT

- Sick patients need to be in the OR - NOT in the CT
- Delay to control of bleeding increases mortality
- Most high grade (bad) injuries to the liver and spleen need to be in the OR

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Neurogenic shock: The anesthesiologists' nemesis

Dr. S. Sulser, Winterthur

- Neurogenic Shock
  - cardiovascular shock (hpotension, bradycardia)
  - massive vasodilatation
  - imbalance of sympathicus and parasympathicus
- Neurogenic shock treatment:
  1. fluids (cristalloids prefered)
  2. vasopressors (1. α-adrenergic 2. β-adreneric)

MAP 80-90 mmHg may lead to sign. more blood loss

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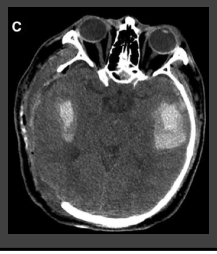
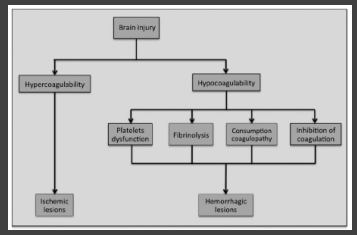
Session 4 Trauma Beyond ATLS® – The brain makes the difference

Moderator – Prof. Dr. M. Kaps, Bern

Coagulopathy after traumatic brain injury – Incidence, time course, and therapeutic options

Dr. T. Lustenberger, Frankfurt, Germany





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Coagulopathy after traumatic brain injury – Incidence, time course, and therapeutic options

Dr. T. Lustenberger, Frankfurt, Germany

- Coagulopathy in 32% of blunt TBI
- Combination of hypo- and hypercoagulability

- TBI coagulopathy is related to poor prognosis
- Research needed to provide evidence-based treatment

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Diffuse axonal brain injury (DAI): The dos and don'ts to improve patients' outcome

PD Dr. M. Hänggi, Bern

- DO NOT
  - expect to see microscopic alterations of axons in CT/MRI
- DO
  - always consider DAI in patients with trauma with depressed level of consciousness
  - minimize secondary insults in TBI patients
  - before prognostication: wait in younger patients with DAI → reconnection takes time

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Coordinated medical services (CMS) in disaster management in Switzerland

Divisionär Dr. A. Stettbacher

- CMS Federal responsabilities: Earthquakes, CBRN Terrorism / Accidents, Pandemics --- On request of Cantons
- 800 emergency beds as strategic reserve managed by the Armed Forces
- All soldiers: Basic Life Support (BLS) and Advanced Life Support (ALS)
- Many incentives: Military Training for Medical, Dental and Pharmaceutical Students

- New pharmaceutical production site of the Armed Forces Pharmacy

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Sandy – what you can learn from a storm

Prof. Dr. S. Teperman, New York, USA

- Water, water… , flooding, no electricity, no fuel
- All disasters are local –and local coalition partners are the key to success
- Disasters work out best: doctors and nurses work side by side with administrative decision makers

- Aftermath: Hospital closes for months. No ER for over a year
- Primary Care Medicine is disrupted

- Money

Modern Management of Major Haemorhage

Prof. Dr. K. Brohi, London UK

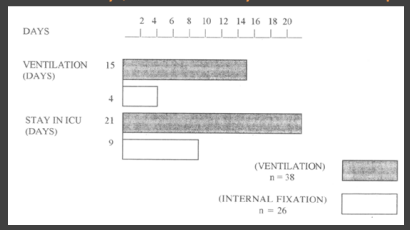
- Too little, to late
- HAEMOSTATIC Resuscitation
  - Early haemorrhage control
  - Permissive hypotension
  - Limit fluid infusions (dilution)
  - Target coagulopathy

We often do not know what we are doing, I cannot help your other believes

Plate it! The importance of surgical restoration of chest wall integrity

Dr. R. Kuster, Bern

- **Intervention:** Immediate (within 1 d), delayed (within 7 d), Secondary , Late: Mainly in intubated patients
- Ahmed et al:



- In Bern: No complication, no revision

Don't do the patient more harm! – Don't plate it!

Prof. Dr. R. Stocker, Zürich

- Pain control
- Mechanical ventilation should be avoided
- Metaanalysis : In favor of stabilisation

BUT: Do not trust the metaanalysis

- Conclusion: Insufficient evidence.
  Only for patient without lung contusion who were unnecessarily intubated and mechanically ventilated shortens day of mechanical ventilation.

From the 'Pizzo della Croce' to the Highway 'A2' – Lessions learned from preclinical trauma care in the Ticino region →"FLORIDA OF SWITZERLAND"

Dr. B. Savary-Borioli, Lugano

- "Ticino trauma chain of survival": Base at hospital of Lugano
- "Unité de doctrine": Federazione Cantonale Ticinese Servizi Autoambulanze (FCTSA)
- "First Hour Quintet" is focused by FCTSA
- 10 platinum minutes on site (often less is more)
- Teamwork important when working in the emergency scene
- < 1% only are the costs of EMS-care (of the total costs of treatment)

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Targeting the most suitable trauma center for my severely injured patient: Is it time for guidelines?

Dr. M. Lehmann, REGA

- 12 trauma centers, stroke centers, burn centers, severe trauma in children, burn center for children
- Rega has guidelines
  - „Treat first what kills first“
  - … and bring the patient to the right place
  - If the preclinic assessment is correct

Underestimation of NACA Score of 20% in polytrauma and up to 51% in acute myocardial infarction
(> 100'000 patients, all air-medical transport)

  - And often it is dark…

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Mountain Rescue – Swiss Rescue Skills brought to the Himalayas

G. Biner, Zermatt, Dr. M. Brodmann Mäder, Bern, B. Jelk, Zermatt

- Challenges: Altitude, Oxygen, Flying skills, Ressue bag
- Difficult terrain (and climbers should be careful)

- Altitude related health problems
  - Acute mountain sickness
  - High altitude cerebral edema
  - High altitude pulmonary edema
  - Accidental hypothermia and frostbitee

- Knowledge Transfer -- Networking important

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Session 8 - Tough trauma cases: The experts' decisions

Experts panel: Prof. Dr. A. B. Peitzman, Pittsburgh, USA, Prof. Dr. S. Rosenman, New York, USA, Prof. Dr. H. C. Pape, Aachen, Germany, Prof. Dr. A. Plecko Zürich, Prof. Dr. J. Osterwalder, St. Gallen, PD Dr. B. Schmärzger, Bern, Dr. T. Lustenberger, Frankfurt, Germany

Case presentations and discussion of unusual and tricky trauma case

Prof. Dr. M. Keel, Bern

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Next Meeting

4th Swiss Trauma & Resuscitation Day

27th March 2015