



ATLS®

Advanced Trauma Life Support Norway

ATLS in Norway

Olav Røise

Medical Director

ATLS® Norway

Purpose with Lecture

- To encourage and get radiologists involved in ATLS education



ATLS®

Advanced Trauma Life Support Norway

Framework

- What is ATLS?
 - History and status
 - The concept
- Implications for the radiologist
- The radiologist role in initial trauma treatment
- Role in the ATLS teaching program

What is ATLS?

- Implications for Radiology - Radiologists role in treatment and teaching

- **ATLS = Advanced Trauma Life Support**
- An educational program for doctors treating severe trauma
 - All kind of surgeons, anesthetists, radiologists
- Initial handling
 - In hospital diagnostics and treatment
 - The “first hour”

The concept

- Primary survey
 - Focus on lifesaving diagnostics and treatment
- Secondary survey
 - Complete examination of the whole body to disclose all injuries

The Primary Survey

- **A** - Airway secured with C-spine protection
- **B** - Breathing/ventilation/oxygenation
- **C** - Circulation: Stop the hemorrhage
- **D** - Disability (neuro status)
- **E** - Exposure/environment – bodily temperature

The secondary survey

- Performed when patient is cleared for life threatening injuries
- Minutes to hours after admission

The Concept

- Treat the greatest threat to life first
- Definitive diagnosis not immediately important
- Time is of essence
- Do no further harm

Program goal

- Teach basic knowledge for approaching a trauma patient
- Teach skills to handle initial management
- Set up a standard way for handling trauma patient
- Individual scenario based training

International program and impact

- > 500,000 doctors trained worldwide in about 50 countries
- Sweden, Denmark and Norway, but not Finland and Iceland of the Nordic countries
- ATLS principles used worldwide
- Common trauma language
- Positive impact on trauma treatment

ATLS history

- Established in USA in 1980
- Outside North America in 1986
- In England as the first European country in 1988
- Norway in 2004

The Start in Norway

- Initial steps were taken in 1999
- Application to American College of Surgeons (ACS) delivered in 2002
- Funding was raised by;
 - Norwegian Air Ambulance Foundation
 - Laerdal Medical
 - The Norwegian Medical Association

The Start in Norway

- December 2003
 - The first course in Fresno, California, USA
 - Visit to ATLS and ACS offices in Chicago
- September 2004
 - Inaugural course
 - 3 from Europe (2 instructors from Denmark and educator from Portugal) and 4 Americans
- November 2004
 - The first student course by a Norwegian faculty

Courses so far...

- Totally 24 Student courses are conducted since ATLS 2004 in Norway
- Number of students 391
- > 200 courses run in UK - annually

Students come from...

Specialty	Number
Surgery	204
Anesthesia	157
Other	13 (2 radiologists)

Instructors come from..

Specialty	Number
Surgery	29 (1 neurosurgeon)
Anesthesia	17
Radiology	1

€conomics

- Course fee: € 1'000.- NOK 8'000.-

- Trauma treatment is a team work
- All members of the team has to understand the principles of initial treatment
 - ATLS principles

- A radiologist has to understand basic traumatology and the implications thereof
 - When to take x-ray
 - When not to
 - Stop examinations without lifesaving purposes during initial and unsettled phase

- Chest and pelvic AP film during primary Survey
- Most diagnostic examinations except chest and pelvic films are done in a stable patient
- Secondary survey is done after the patient is cleared for circulatory status and other life threatening injuries

- Interventional radiology has a significant role in initial treatment

—C; stop the bleeding

- Interventional radiology will have a greater importance in future traumatology
 - Interventional radiologist will work together with the surgical team in the combined angio/surgical emergency room in ER

- CT scanning will most probably have another role in future

• A

• B

• CT.....

- Radiology is important part of primary and secondary survey
- The radiologist can contribute significantly to improve ATLS teaching
 - Not necessarily by doing the teaching in radiology, but by giving instructions to the teaching clinician
 - Contributing during the courses

Conclusions

- ATLS concept (A,B,C,D and E) is the basis for initial trauma treatment worldwide
- Radiologist is increasingly taking part in the initial care of the traumatized patient
- Radiologists should be more involved in trauma ATLS education and treatment