6. TH DANISH EMERGENCY MEDICINE CONFERENCE 2014

Dansk Selskab for Akutmedicin
Danish Society for Emergency Medicine

Daena
Danish Emergency Nursing Association

REDDERNES
UDVIKLINGSSEKRETARIAT

Region Syddanmark
OUH
Odense
Universitetshospital

MAYO
CLINIC

DEMC6

Written by:
Anh-Nhi Thi Huynh, Rebecca Østervig, Louisa Eilschou Sparring, Larshan Perinpam

"Once upon a time…"

On November 20th to the 21st 2014 more than 600 people gathered to attend the 6th Danish Emergency Medicine Conference (DEMC6). The conference was held at Odense Congress Centre in Odense, the city of fairy tales and home of the famous writer Hans Christian Andersen.
As one of the few countries in Europe, Emergency Medicine is still not recognized as an independent specialty in Denmark. For some people, the specialty may be considered as the "ugly duckling" to keep it in the spirits of H.C Andersen. Hopefully, someday the fairy tale will end happily, **with a joint entrance for all patients entering the ED.**

The conference was carried out with focus on "Emergency *Medicine all the way"*. A slogan illustrating the continuing need of diverse professional competences and collaboration, which is of great importance for the acute ill patient. Multiple participants and supervision should strengthen this collaboration so no one stands alone.
It is no secret that arranging a conference of this kind takes a lot of preparation. DEMC6 would not have been possible without the collaboration between the doctors (DASEM, Danish society for Emergency Medicine), nurses (DAENA – Danish Emergency Nursing Society) and paramedics (RUS, Danish Society of paramedics). Furthermore the conference was a co-operation with the Odense University Hospital (OUH) in Denmark and Mayo Clinic in the US.

Prior to the actual conference, it was possible to attend several pre-courses on the 19th of November e.g. *Emergency Medicine Ultrasound (hands-on), Design and organization of an ED, Pre-hospital ECG, Pre-hospital -Stop of massive bleeding, Emergency Medicine course- high risk presentations and Research 101 – how to publish a paper.*
The program for DEMC6 varied between lectures and five simultaneously tracks with a theme of their own. In this way, both medical and non-medical professions could arrange their individual programs and create a conference based on their own interest within Emergency Medicine. This year the work group behind DEMC6 also wanted to focus on the ongoing research within EM in Denmark and therefore a separate research orientated track was created. Furthermore posters were placed in the center of the coffee/lunch and exhibition hall to create attention.

With a great welcome from the chairmen of the three organizations the words was passed on to the first Danish Professor in EM and representative from OUH, Anne Marie Lassen.

" We are Emergency Medicine and we are currently trying to define our professionalism in Emergency Medicine. It is an honor and pleasure to be in the front of the Danish health care system and a part of this conference"

With these inspiring words DEMC6 was ready to begin. Firstly, by Flemming Møller Mortensen (politician and spokesman in health care) and Dr. Simon Carley (professor in Emergency Medicine at Manchester. Overall DEMC6 emphasized the importance of communicating and sharing information to inspire, educate and cooperate to provoke Emergency medicine in Denmark.

Input, service and quality! - Opening talk
Flemming Møller Mortensen, member of the Danish parliament and part of the Danish government health Committee.

He talked about the importance of collaboration amongst different workgroups in the ED. We (the ED's) need to provide a care of high quality because we are in a country where we pay high taxes and the population expects a high quality of care. The ED needs to provide that! As a member of the Danish parliament we are listening to the public voice, which are defining how the care in the ED should be. And we can see that there is a common goal, and that is amazing! By having a conference like DEMC6 – the first steps towards you are building the part of the healthcare that many people are looking forward to! Keep up the good work!

"The interest you express and demonstrate through your work and actions is the motive force that will bring Emergency Medicine further in Denmark."

What to change and when to believe? – Opening talk
Simon Carley, Professor. MD. Consultant in EM, Manchester, UK.

Dr. Carley started off by saying: I'm interested in you! To influence patient care, you need to believe. Many of the things we are doing are actually harmful. Evidence and practice need to be connected. Our practice goes through our believes and evidence as well. Half of what we thought is wrong; the problem is we don't know which half. Change is slow. Change is dangerous, adopt things earlier, otherwise you will kill! But don't adopt too early that might kill people as well (ex. Flecainide, heart, mortality, etc.). You are working in emergency medicine, which is a very vital part to get the evidence to the patients. Is our behavior consistent? We are not! So what can we do? What you believe is absolutely what is going to happen to your patients. You are important. Change is hard. You must look at the past to see where you can change. Last but not least, most important of all: You must focus on patient related outcome!

QUICK FACTS ABOUT DEMC6

- About 600 attendees
- More than 50 speakers at the conference
- 70 posters were accepted
- 2nd emergency medicine conference held by the collaboration between DASEM, DAENA and RUS.
- 6th Emergency Medicine Conference in Denmark.

SPEAKERS

Daniel Johnston
Emergency Nurse and researcher, NIHR clinical MRes Fellow at King's College London

Daniel Johnston lectured on how emergency physicians and nurses manage care, when dealing with competing pressure. The lecture was based on results from an ethnographic study and interviews with the nurses in the British Emergency Departments. The study aims to investigate factors that induce pressure, such as high workload, work environment, communication and interpersonal conflict and to find and link strategies to manage and cope with these pressure factors.

Anne Grethe Moelbak
M.D, Department of Emergency Medicine, Koege Hospital

Dr. Moelbak talked about education in the Danish Emergency Departments. She pointed out the importance of focusing on improving professional skills through feedback and by matching learning needs and possibilities. One of the major limitations in the foundation of a learning department is the lack of IT-opportunities to monitor the clinical skills among doctors at all levels.

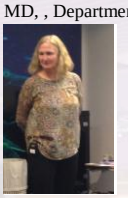
Marie Jessen,
Danish Medical student, President of Danish Student Organization for Emergency Medicine, SOFAS.

Marie Jessen talked about the establishment of Emergency Medicine as a new and independent medical specialty in Denmark. Marie shared views based on own experiences from her internship in Emergency Medicine at Beth Israel Deaconess Medical Center l in Boston, US. She believes that recognizing Emergency Medicine as a specialty will benefit the Danish Emergency Departments. Young doctors and medical students show great interest in Emergency Medicine and should be able to choose the Emergency Departments as their career pathway. As seen abroad, this will require great training and supervision. Hopefully, the Danish ED's will be able to provide this in time with a future establishment of Emergency Medicine.

The Danish Emergency Physician – a short video
Danish society of Emergency Medicine (DASEM) had a premiere on their short video "akutlægen" - a perspective on the role of the Danish Emergency Physician.
Animator: Sarah Pavelics Simonsen

Link: https://www.youtube.com/watch?v=FVM6lPgvABM&feature=youtu.be

Inger Soendergaard
MD, , Department of Emergency Department Herlev Hospital



Dr. Soendergaard talked about the newly established European Board Examination of Emergency Medicine (EBEEM). This includes an examination or assessment to confirm successful completion of specialty training in Emergency Medicine. The exam is divided in two.
Part A is an online test, which consists of multiple-choice questions based on knowledge in clinical and basic sciences. Part B is based on different clinical scenarios/cases that assess different skills and nontechnical skills such as leadership and communication tools, professional ethics and organizational ability.

Jeff Perry
MD, MSc, Ottawa Hospital

Dr. Perry spoke on "*How to Determine if this Headache is a Subarachnoid Hemorrhage*". Dr. Perry mentioned the difficulty in characterizing a headache related to a SAH and the problematic decision on when to do a CT or not.
The presentation discussed which patients that are at high risk for subarachnoid hemorrhage as determined by The Ottawa SAH Rule. 1 % of all headaches turn out to be subarachnoid hemorrhage, and the condition can be difficult to diagnose. Furthermore it was discussed if early CT head is sufficient to rule out a subarachnoid hemorrhage, how to interpret cerebrospinal fluid results, and when cerebral angiography is required. Dr. Perry ended the talk with the recommendation of using the Ottawa SAH rule in the clinical work.

Henry Schiller and Bo Madsen
Dr. Schiller, MD, Department of Surgery, Chair Trauma, Critical Care General Surgery Division, Mayo Clinic
Dr. Madsen, MD, M.P.H, Senior Associate Consultant, Assistant Professor, Department of Emergency Medicine, Regional director for Emergency Medicine SE, Mayo Clinic

The two doctors from Mayo Clinic in Minnesota shared initiatives from their Emergency Department with the lecture: *Roles and corporation between Surgery and Emergency Medicine*.
Firstly, they spoke about the historical perspective and the implementation of the Emergency Medicine Residency Program in 2001 at Mayo Clinic, which lead to the current status in the ED. Mayo Clinic is a level 1-trauma center and nearly 80.000 patients visit the ED each year. However, before establishment of the EM program the department had no practice guidelines or restrictions for the residents working hours.
Since 2001, the clinic has focused on team performance and has attempted to flatten the hierarchy by defining guidelines. This has created a learning environment where everyone feels free to ask

questions and seek advice when needed in critical as well as non-critical situations. Everyone knows his or her role in the daily routines of the department and the residents have rotations being the team leader, because it is important everyone knows how to take responsibility in a busy and demanding environment.
The overall performance in the department has since 2001 improved, the communication has been reinforced and controversies reduced. The two doctors ended their lecture with essential keywords such as:

Always keep the patients interest.
Always work in teams and optimize the cooperation through clear communication in decisions and actions.

Simon Carley
Professor, MD, Consultant in Emergency Medicine, Manchester

Dr. Carley talked about the HMIMMS (Hospital Major Incident Medical Management) approach to hospital major incident. Major incident planning has during the last couple of years been a defect in the English health care system. HMIMMS system created by Advanced Life Support Group was developed based on poor reaction time when incidents occur and a desperate need for new strategies to improve this.
Dr. Carley tried to illustrate how you manage business as usual when an incident occurs. Furthermore Dr. Carley pointed out that you always need a plan when a major incident occurs. In UK the HMIMMS system provides this. The system has made a plan for disaster management because it takes problems of delivering a response across the full range of health systems 24/7/265. Furthermore, HMIMMS has made a scale plan so people know what they are supposed to do when major incidents become a reality.

Jørn Therkilsen Guldhammer,
MD, Department of Emergency Medicine, Koege Hospital

Dr. Guldhammer gave a talk about how the Emergency Department in Koege trains for major incidents. EM is interdisciplinary and the ED in Koege have acknowledged this by offering their staff, nurses, doctors, secretaries etc. a monthly course in how to act when major incidents takes place. These courses have led to well-educated staff and have since 2011 reduced the overall reaction time from 20 to 5 min.

Jesper Weile and Rasmus Aagaard
Dr. Weile, MD,
Dr. Aagard, MD

Dr. Weile and Dr. Aagaard made a live demonstration on how ultrasound can provide diagnostic information when dealing with critical ill patients. The session was based on the ABCDE principal, and included among other things a demonstration of ultrasound-guided peripheral intravenous access.
The demonstration was followed by a quick review of the relevant ultrasound pathology.

Grethe Andersen
Professor, MD, Department of Neurology, Aarhus University Hospital

Dr. Andersen talked about the effects of preconditioning in relation to cerebral apoplexia and the results of her current study. Acute stroke treatment requires fast recanalization by either thrombolysis or thrombectomy. The use of preconditioning can potentially sustain the energy in the cell and protect the pericytes. Furthermore Preconditioning can result in higher neuroprotection and thereby prolong the time-window for treatment. Their study showed that the patients treated with preconditioning had lower morbidity.
Lastly Dr. Andersen mentioned the need for more research on this area and especially focus on the neurological status before start of treatment. Perhaps more intensive stimulation and repetitive preconditioning treatment is also needed

Laura Walker and Bo Madsen
Dr. Walker, MD, Department of Emergency Medicine, Albert Lea-Austin ED Mayo Clinic
Dr. Madsen, MD, M.P.H, Senior Associate Consultant, Assistant Professor, Department of Emergency Medicine, Regional director for Emergency Medicine SE, Mayo Clinic

Dr. Walker and Dr. Madsen talked about the benefits of hiring EM physicians to the regional ED's (part of Mayo Clinic health system) - *Effects observed after implementation of EM*.
The ED is a major source for the admission to the Hospital. EM is the front door to the hospital, not the back door! They had more than 87 shifts open each month that needed to be staffed! But somehow you need to fill the shifts, because the ED does not say it's closed! It's a 24/7! You will just hire anyone who comes! You hire the one you get! The foundation of an ED and survival is covering the shifts! You need a stable work force! Otherwise you can't implement protocols, quality, education, etc. They invited resident to cover a few shifts and to experience community ED's. They liked it, and some of them are now reconsidering their career choices! With the hiring of EM physicians - the bonus paid to staffing challenges decreased significantly! Today they only have 65 open shifts a month! Another reason to hire EM physicians is that the level of caring goes up when you are an "owner" instead of a "renter". In the South East region you can be entirely hired to the community hospital or you can be working 80% community and 20% in academic! They are recognized as equal colleges both places! They use scribers (who notes everything down) to follow the consultant, and you put your name on, that works very well and less time in front of the computer. Another issue they had in the regional ED's is the number of LWBS (left without being seen) – 382 pts. - in one year - they implemented a new strategy: if you have an empty bed, put the patient in it, if they are in the department someone will take a look at you. They are safer within the department rather than in the waiting room!
A statement from Dr. Madsen and Dr. Walker was: In regional: pool your resources and standardize your treatment! Hire EM physicians!

Christopher Seymour
MD, Ph.D, Department of Emergency Medicine, Pittsburgh

Dr. Seymour talked about sepsis and how it has become a health Care problem in Denmark.
With focus on the results of the ProCESS trials (a multicenter trial in 31 EDs) it is clear that the basics matter the most in sepsis care by: early diagnosis, source control, appropriate antibiotics. Early fluids may improve outcomes.
Dr. Seymour also mentioned the risk of time delay and clarified the challenges in the treatment in sepsis: such as the limited time before initiating treatment and thereby the importance of starting earlier. Here he discussed the role of pre-hospital fluid and presented the current research of pre-hospital fluid associated with mortality.

Casey Clements
MD, Ph.D, Department of Emergency Medicine, Mayo Clinic Minnesota

Dr. Clements talked about the changing standard of Emergency sepsis Care. Firstly he mentioned the development of Guidelines and nomenclature on SIRS, sepsis and septic shock.
Dr. Clements also talked about the outcome of the ProCESS trial and what to do now. Management should be guided by 3 main principles: early recognition, appropriate fluid resuscitation, and early and aggressive antibiotics and source control.
Furthermore he also discussed the use of different types of fluids and how much such should be used in sepsis patients.
With focus on the new process after the ProCESS trial he highlighted the focus on hypotension and lactate (>4). Moreover it is important to define a clear onset time (some may use the arrival time). Lastly it is necessary to define bundle elements such as: when to measure lactate, when to draw blood culture, when to administer antibiotics and how much fluid bolus to use.
If possible Emergency Departments should also recognize the relevance of automatization, which can help to discover septic patients and also track lactate and fluid resuscitation.
In summary Dr. Clements emphasized that what we do matters and that sepsis is a true time sensitive emergency. The use of nomenclature can be confusing and therefore we should focus on hypotension and lactate and most importantly: fluid management, antibiotics and source control.

Mads Rasmussen
MD, Ph.D, Department of Neuro-anesthesia, Aarhus University Hospital.

Dr. Rasmussen talked about the treatment of mild head trauma in adults. Firstly Dr. Rasmussen discussed the new guidelines for mild head trauma , which was published in the Danish medical journal in April 2014 – including the use of S100b.

With the use of MR techniques using diffusion tensor-imaging studies has shown that some patients actually have complications after a mild head trauma – thereby indicating that the mild head trauma might be more severe. Dr. Rasmussen mentioned that 15% would have complications in form of post concussive syndrome. A diagnosis that is frequently seen in the US and especially related to sport and blast injuries. The syndrome is however a stigmatized and traumatized patient group and in Denmark there has not yet been any follow up of these patients. The current research shows significant and structural lesions in patients with long-term impact after a mild Trauma Brain injury. The patients with complications have shown to have severe changes on MR with lesions on axons correlating to the patients' symptoms.

ABSTRACT CONTEST

Winner of the AstraZeneca's research Price:

- Freddy Lippert

Winners of the oral presentation of abstracts:
Winner of best abstract (doctors):

- Michael Kristensen: *Routine biomarkes are strong predictors of short term mortality*

Winner of best abstract (non-doctors):

- Heidi Gamst: *When and why are the elderly patients admitted and readmitted*

Winner of the best poster:

- Daniel Henriksen: