

It is time to pay attention to fluid management: A warm welcome to the 2nd International Fluid Academy Day

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We are very excited to present you the Second International Fluid Academy Day! This 2nd iFAD will deliver once more a compact one-day program on clinical fluid management, a topic that has been neglected for a long time. Although the medical community clearly seems to recognise the importance of looking at fluids beyond their role in mere hemodynamic stabilization as proven by the time spend on this topic on medical congresses and in the literature [6]. Nevertheless we are still far away from treating fluids as any other drug we would give to our patients. The side effects of fluids are without doubt more than relevant. The associated morbidity and mortality to poor fluid management is either related to hypovolemia and convective problems or to fluid overload with proven morbidity in all kinds of patients and diseases, partly due to diffusion problems resulting in interstitial oedema, in either case the oxygen cannot get to the tissues [1, 5]. There is also increasing data proving that the induction of hyperchloremic metabolic acidosis due to the use of unbalanced solutions is not as innocent as previously thought.

During the 1st iFAD on November 19, 2011 (at the Elzenveld Congress and Convention Centre in Antwerp) the goal was to establish a basic knowledge on fluids and monitoring. Many questions however remain to be answered: What is the real impact of hyperchloremic metabolic acidosis induced by normal saline? Where is the colloid versus crystalloid debate evolving with the new knowledge gained from the recent big trials? Is there relevant difference between starches, gelatins or the more costly human albumin? What is the place of the hypertonic solutions? What will the future bring us? Can capillary leakage be treated with colloids instead of worsening it? Should the microcirculation be the real target instead of the classic parameters like blood pressure? What is the best fluid strategy in sepsis, the perioperative setting, traumatic brain injury, kidney injury, ...?

And there is more! Since fluid overload is no longer seen as a cosmetic problem but as hazardous and

deleterious to many of our patients, a real challenge lies in the search for strategies to avoid this complication [4]. Modern hemodynamic monitoring techniques can help the clinician in finding thresholds to start and stop filling his patients [2]. Is there still a place for the central venous pressure (CVP) and the pulmonary capillary wedge pressure (PCWP)? Is there an advantage in the use of volume instead of pressure monitoring? Which technologies do we have available? What is the place of lactate? What is around the corner with regard to non-invasive techniques to monitor cardiac output? Can we use other biochemical markers to help us to understand whether the patient will transgress spontaneously from the ebb to flow phase of shock, and is there a good marker for capillary leak, like the capillary leak index (CLI) that can be calculated by dividing the serum C-reactive protein (CRP) by the serum albumin [3]? Are there specific monitoring techniques for specific end organs?

As organising committee of the 1st iFAD symposium it is now our wonderful privilege to invite you to join us again for the second International Fluid Academy Day (iFAD), here in Antwerp, Belgium, on November 17, 2012. The 1st iFAD was attended by 274 doctors coming from 33 countries (Fig. 1). The separate nursing session (in Dutch) was attended by 104 nurses (from Belgium and The Netherlands) and together with 30 representatives from the industry a total of 400 people gathered last year in Antwerp, confirming the interest in this topic that can really be considered as a "hot and sexy" subject. The 2nd iFAD meeting is endorsed, amongst other societies by the European Society of Intensive Care Medicine (ESICM), the World Federation of Societies in Critical Care Medicine (WFSCCM), the European Society of Anaesthesiology (ESA), the World Society on Abdominal Compartment Syndrome (WSACS) and many national European societies of Intensive Care like the French Society (SRLF), the Dutch (NVIC) and the Belgian Society of Intensive Care (SIZ), amongst others. An international faculty of world leaders in the field will be your hosts, and you are guaranteed a global revelation on fluid management

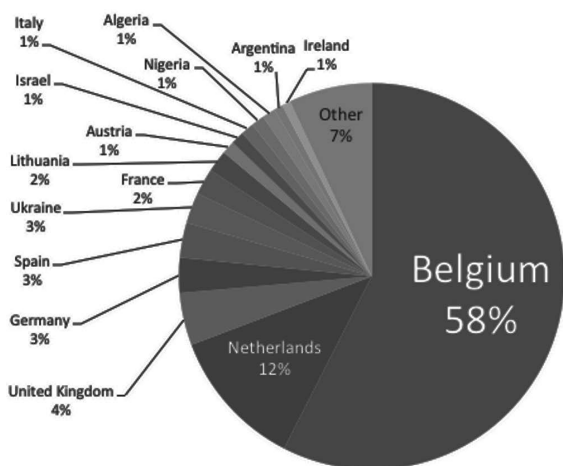


Figure 1. Pie diagram with distribution of first IFAD participants in 2011 according to country of origin. Other countries included 1 participant from each of the following countries: Albania, Brunei, Canada, Czech Republic, Denmark, Egypt, Georgia, Ghana, Iran, Letland, Luxembourg, Malaysia, Oman, Pakistan, Poland, Serbia, Sudan, Montenegro, Turkey, USA

Table 1. Overview of top 5 talks during the 1st iFAD

Speaker	Title
prof. dr Azriel Perel	Techniques for the future: continuity versus accuracy (honorary iFAD closing lecture)
prof. dr Jean-Louis Vincent	Frank Starling revisited: the importance of fluid responsiveness
dr Can Ince	Pushing the boundaries: what's beyond the final frontier?
dr Manu Malbrain	Fluid overload: poor cosmetics or bad medicine?
dr Eric Hoste	The clash of the titans: crystalloids versus colloids

and hemodynamic and organ function monitoring. The participants rated all talks as excellent with an average score of 77.4%. The top 5 talks of last year are listed in Table 1. The majority of the participants (86%) found the morning sessions on fluid management well balanced covering all basic aspects as well as hot topics (Fig. 2), while 88% also stated that their knowledge on fluid management improved, and 76% of the participants stated that what they learned during the morning sessions changed their daily clinical practice. The majority of the participants (73%) found the afternoon sessions on hemodynamic monitoring well balanced covering all basic aspects as well as hot topics (Fig. 3), and 73% also stated that their knowledge on hemodynamic monitoring improved. Finally 70% of the participants stated that what they learned during the afternoon sessions changed their daily clinical practice. A total of 71% of the participants found that there was enough time for discussion and interaction, and 68% found the overall mix between fluids and monitoring

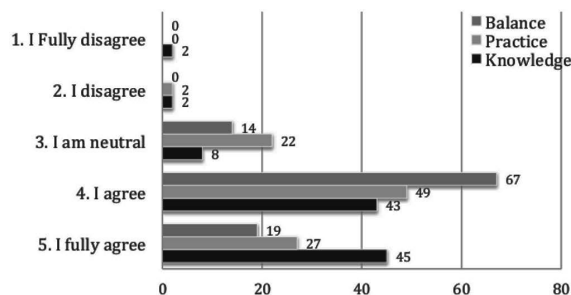


Figure 2. Evaluation of 1st iFAD morning sessions on fluid management. Distribution of answers (in percentage) to different questions regarding the morning sessions. Black squares denote answers on question: “During the morning sessions my knowledge on fluid management improved”. Light grey squares denote answers on question: “What I learned during the morning sessions will change my daily clinical practice”. Dark grey squares denote answers to the question: “The morning sessions were well balanced and covered all relevant hot topics”.

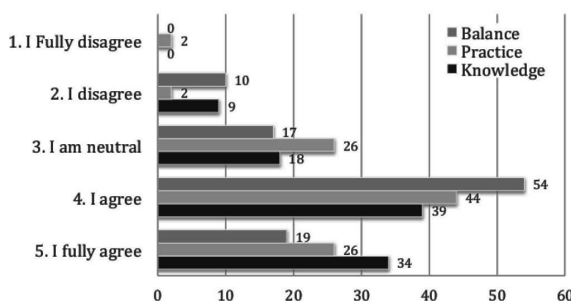


Figure 3. Evaluation of 1st iFAD afternoon sessions on hemodynamic monitoring. Distribution of answers (in percentage) to different questions regarding the afternoon sessions. Black squares denote answers on question: “During the afternoon sessions my knowledge on hemodynamic monitoring improved”. Light grey squares denote answers on question: “What I learned during the afternoon sessions will change my daily clinical practice”. Dark grey squares denote answers to the question: “The afternoon sessions were well balanced and covered all relevant hot topics”.

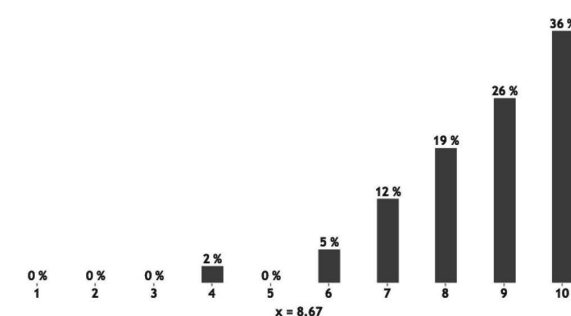


Figure 4. Overall rating of the 1st iFAD meeting.

well-balanced, while 22% preferred more focus on fluids, 10% wanted to learn more about monitoring. Finally, the average rating of the overall organisation of the 1st iFAD meeting was 8.67 on a scale from 1 to 10 (Fig. 4). During the meeting 14 knowledge questions on fluid management and hemodynamic monitoring were asked (7 for each category). The voting pads allowed us to identify the 3 prize award



Figure 5A. The 1st iFAD prize award winners. Panel A. The 3rd place. Manu Malbrain (left) and Niels Van Regenmortel (right) next to the 3rd Prize Award Winner, Sandhya Nirodi from the United Kingdom (middle).



Figure 5C. The 1st iFAD prize award winners. Panel C. The 1st place. Manu Malbrain (left) and Niels Van Regenmortel (right) next to the 1st Prize Award Winner, Arthur Nieuwenhof from The Netherlands (middle).



Figure 5B. The 1st iFAD prize award winners. Panel B. The 2nd place. Manu Malbrain (left) and Niels Van Regenmortel (right) next to the 2nd Prize Award Winner, Willem Peter Kingma from The Netherlands (middle).

winners at the end of the 1st iFAD: the 3rd place went to Sandhya Nirodi from the United Kingdom with 60 points, the 2nd prize award went to Willem Peter Kingma from The Netherlands with 63 points and the 1st prize award went to Arthur Nieuwenhof from The Netherlands with an ex-aequo of 63 points but a faster response time (of 1061 compared to 1209 seconds) (Fig. 5).

The target audience for this year's meeting are all specialists caring for the critical patient: intensivists, anaesthesiologists, emergency physicians, internists, surgeons, burn care specialists, nurses and other health care workers. The 2nd iFAD (www.fluid-academy.org) will provide an environment for interaction and discussion, definitions and consolidation of the knowledge in the field of fluid management and not only hemodynamic monitoring but also monitoring of other organ functions.

The program highlights are listed in Table 2. We are very proud to announce that beyond our wildest expectations this 2nd iFAD will be attended by 450 participants (300 doctors, of whom 27 faculty, 100 nurses and 50 representatives from the industry). Because of this success we already planned the 3rd iFAD, as a 2 day symposium on November 29—30, 2013 probably again at the Radisson Blu Astrid Hotel in Antwerp. Mark the date, submit an abstract and check the website regularly for updates and the preliminary program.

We are proud to introduce to you the first issue of a new journal called Fluids, the international journal of medical fluid management. In this issue of Fluids you can read the meeting report of the 1st iFAD and the proceedings of the invited lectures together with the abstracts of the “poster” session in addition to the full physician and nursing program of the conference (due to the busy time schedule during the 2nd iFAD no formal poster sessions will be organised. Next year the iFAD will be a 2 day event and separate sessions with poster and oral presentations from submitted abstracts will be organised).

The beautiful city of Antwerp, one of the biggest sea-harbours in the World and famous for its fashion designers, beer and diamonds is located in the North of Belgium. The shores alongside the river “Schelde” offer a peaceful and inspiring environment. All scientific sessions will take place at the Radisson Blu Astrid Hotel Congress and Convention Centre. During each session and especially at the social gathering in the evening enough time will be provided to get to know each other and to exchange ideas in a relaxed atmosphere. Despite the global warming, the weather in Antwerp is not subtropical and, although they say in Belgium...”rain is always followed by sunshine”, you better take that umbrella along whilst walking the harbour shores...

Table 2. Overview of the 2nd iFAD Program highlights.

A compact but complete one day program providing an update in fluid management and hemodynamic monitoring
Towards a perfect fluid strategy in different situations: sepsis, ARDS, renal and liver failure, brain injury, trauma, ...
Monitoring fluid responsiveness
Focus on end-organ monitoring: the brain, the cardiorespiratory function, ...
Reaching the target in difficult situations: cardiorenal dilemma, capillary leak, perioperative fluid optimization, abdominal hypertension, ...
A honorary iFAD closing lecture
Interactive case discussion
Workshops during the lunch break
An international faculty of leading authorities in their field
An interactive session with voting system to put it all into practice
A nursing session (in Dutch) on the same topics, but at their own level
Accreditation has been requested and granted for Belgium and The Netherlands

We wish you all a very successful iFAD on which you can meet the faculty members during the breaks and social events. Thank you for not having missed this unique educational and scientific opportunity, and for having joined us in November 2012 in Antwerp:

“It is time... it is time to pay more attention to fluids!”
 The motto of the 1st iFAD was “Give fluids? Make it choice, not chance and above all avoid floods!” The motto of the 2nd iFAD will be “Towards the perfect fluid strategy!”

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