Author’s response to reviews

Title: Clinical Evaluation of an Air-Capsule Technique for the Direct Measurement of Intra-abdominal Pressure after Elective Abdominal Surgery

Authors:

Jens Otto (jeotto@ukaachen.de)
Daniel Kaemmer (dkaemmer@ukaachen.de)
Andreas Biermann (abiermann5@hotmail.com)
Marc Jansen (mjansen@ukaachen.de)
Rolf Dembinski (rdembinski@ukaachen.de)
Volker Schumpelick (vschumpelick@ukaachen.de)
Alexander Schachtrupp (alexander.schachtrupp@bbraun.com)

Version: 2 Date: 16 June 2008

Author’s response to reviews: see over
Author's response to reviews

Title: Clinical Evaluation of an Air-Capsule Technique for the Direct Measurement of Intra-abdominal Pressure after Elective Abdominal Surgery

Authors:
Jens Otto M.D. 1, Daniel Kaemmer M.D. 1, Andreas Biermann M.D. 3, Marc Jansen M.D. 1, Rolf Dembinski M.D. 2, Volker Schumpelick MD. 1, Alexander Schachtrupp M.D. 1

1) Department of Surgery, University Hospital RWTH Aachen, Germany
2) Department of Anesthesiology, University Hospital of the RWTH Aachen, Germany
3) Department of Anesthesiology, Karolinen Hospital Arnsberg, Germany

Version: 1 Date: 30. Mai 2008

Author's response to reviews: see over
Dear Robin Cassady-Cain,
we have revised the manuscript according to your reviewer’s reports point-by-point. In the following you will find the corresponding text passages.

With kind regards
Jens Otto

Reviewer's report 1
Title: Clinical Evaluation of an Air-Capsule Technique for the Direct Measurement of Intra-abdominal Pressure after Elective Abdominal Surgery
Version: 1 Date: 25 April 2008
Reviewer: Zsolt Balogh
Reviewer's report:
Minor comments:
1. the word fragmentation is not the most fortunate one in the context of the pressure measuring catheter.
   We have changed this as follows: “Furthermore, withdrawal of the measurement probe at the end of the measurement period could be done uneventfully in all patients without any defect of material or complication.” (page 7, line 7)
2. The paper and the abstract should have in its conclusion that the very good agreement is only in the relatively low pressure ranges <17mmHg (that is what they experienced).

“Associated with relatively low pressure ranges (<17mmHg), results are comparable to bladder pressure measurement.” (page 2, line 17)

“Furthermore, we have to mention that the good agreement is associated with relatively low pressure ranges (<17mmHg).” (page 9, line 3)

“Being aware of relatively low pressure ranges (<17mmHg), agreement with standard IVP was acceptable in the underlying study.” (page 10, line 19)

3. It is important finding that the invasive pressure measurement agrees with the vesical pressure measurement. But this means that the vesical pressure measurement is as good as the invasive without extra instruments, catheters etc... Vesical continuous pressure can be measured during operation while the abdomen is closed.

“Although continuous intravesical pressure measurement is available and could be done without extra instruments [25], some issues remain to be investigated: These are the effect of pelvic trauma, detrusor activity and variable bladder compliance [2] but probably more important the influence of reference point and patient positioning.” (page 9, line 16).

Reviewer’s report 2
Title: Clinical Evaluation of an Air-Capsule Technique for the Direct Measurement of Intra-abdominal Pressure after Elective Abdominal Surgery
Version: 1 Date: 7 May 2008
Reviewer: Franco Valenza

Reviewer’s report:
Major Compulsory Revisions
The question posed by the authors is well defined. The methods are appropriate and well described. The data are sound and the manuscript adhere to the relevant standards for reporting and data deposition.

1) However, the conclusions regarding the “safe performance” of the tool investigated drawn from data are not balanced and adequately supported by the data. A very low number of patients have been included into the investigation to conclude about either “organ lesions” or surgical site infection”. Authors state that patients were evaluated for “catheter fragmentation” and “catheter related infections and erosion”, but no data are presented.

2) The 5 days follow up of morbidity is too restrictive.

3) The sentence “it can be concluded that the direct measurement did not lead to an additional risk” (discussion) is unacceptable.

The reviewer is right and we have changed the manuscript according to point 1 to 3 as follows: “The short observation period and the small number of patients restrict the expressiveness according to direct intraabdominal measurement related complications.
Comparable studies are missing but to exclude an additional risk of ACM-catheters further studies are needed. (page 10, line 11)