Author's response to reviews

Title: Severe inflammatory reaction induced by peritoneal trauma is the key driving mechanism of postoperative adhesion formation

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Author's response to reviews: see over
To the Editor

Dear Sir,

Thank you very much for your taking charge of the publication of our manuscript entitled “Severe inflammatory reaction induced by peritoneal trauma is the key driving mechanism of postoperative adhesion formation” by Sergei V Pismensky, Zhomart R Kalzhanov, Marina Yu Eliseeva, Ioannis P Kosmas and Ospan A Mynbaev.

Please find enclosed our letters to the reviewers. We have revised our manuscript in accord with the editorial and reviewers’ comments.

I would like to add one point concerning the review of doctor Suzi Demirbag. His opinion may have arisen from our contact in the past (see references).

Sincerely yours,

Ospan A Mynbaev


Comments N1:
We thank doctor Suzi Demirbag for his reviewing of our manuscript. We agree that our research is not fully new but we think that our findings can help surgeons get a more profound insight in adhesion formation pathophysiology.

Concerning questions:
1). Tissue drying or dehydration during open surgical procedures in the abdominal cavity is a common and well-known biological phenomena. We did not aim to study tissue drying or dehydration as such since it simply is one of the factors accompanying OS.
2). There are several adhesion scoring systems and we used the standardized adhesion scoring system, including an evaluation of frequency and character of adhesions on the laparotomy line, on the uterine horns and on the area of the peritoneal adhesion model.
3). We did not study any tissue or blood cytokines.
4). We will try to do our best.
Comments N2
We thank Professor Maria Mercedes Binda for her kindly reviewing of our manuscript.

Concerning questions:
1). References have been changed.
2). The purpose of our study was written clearly.
3, a). Experimental design “double” was omitted. Way of randomization was included in the section “Randomization”.
b). Adult female rats (6 months old) were used.
c). We used standardized surgical procedures but 19 rats died. By our observation it was due to our intramuscular anaesthesia by Thiopental Sodium.
d). Surgical models, and all scorings (adhesions and inflammatory reaction) were done by OAM and MYuE; Randomizations, preparation, anaesthesia and all other manipulations including CO2-pneumoperitoneum and animal care were performed by SVP and ZhRK; Statistical analysis and manuscript preparation OAM, JPK, MYuE.
4). MLI was kept open by eye retractor
5). CO2-pneumoperitoneum set up was rewritten.
6, a). Adhesions were scored as 0; 1-25%; 26-50%; 51-75%; 76-100%.
b). The total inflammation score is a sum of individual inflammation parameter scores
7). In the experimental design section we explained our experimental design therefore we think that it makes clear steps of performed procedures.
8). It is there (Table 3 is included in the discussion).
9). Initially we carried out standardized MLI and adhesion models in both groups, then in the OS group MLI was extended whereas in the LS group CO2-pneumoperitoneum was created. Duration of both procedures was also standardized. Subsequently we presumed that these conditions could cause excess adhesions.
10, a). Questions from the section Results and its last sentence (b) were shifted to the Statistical analysis section.
11). It is there (Fig.4 is included in the discussion).
12, a). The sentence “Subsequently all other gases could …” was fully omitted.
13). a and b: corrected.