REPLY OF THE AUTHORS: We thank Dr. Mynbaev and colleagues for their comments and interest in our work and for trying to explain our findings related to the effect of N_2O upon postoperative adhesions. Some comments, however, are suggestive without data, some incorrect.

Corona et al. (1) published the role of acute inflammation during and after surgery in March 2011, whereas Mynbaev and colleagues' reference (2) was published in November 2011 and thus clearly later.

The authors start their comments with "the influence of CO_2 insufflation on adhesion formation remains controversial." Although the exact quantitative effect can be discussed, the data that peritoneal trauma, including CO_2 pneumoperitoneum, is a cofactor enhancing adhesions at a surgical trauma site through acute inflammation, seem to be firmly established. A full discussion is beyond the scope of this answer.

Some comments are speculation. Although N_2O is highly soluble in water, to the best of our knowledge transport through the intact mesothelial layer has never been demonstrated. Anyway, this does not explain the effect. Additionally, the relationship between "N_2O oxidizes the cobalt atoms of the vitamin B12, inactivating the methionine synthase causing a dose-dependent increase in plasma homocysteine (Hcys)" and prevention of adhesion formation is speculation. Finally, the authors' suggested experiments are highly speculative.

Dr. Mynbaev and colleagues "believe that the number of animals is too small to draw evidence-based conclusions." Although the sample size was small, the data showed significant differences. Increasing the sample size would have improved the *P* value: that does not add any value to the final conclusion of the experiment.

Concerning the clinical effect, we invite the authors to read our article, "Peritoneal full-conditioning reduces postoperative adhesions and pain: a randomised controlled trial in deep endometriosis surgery" (3), in which we confirmed in the human the effectiveness of full conditioning in preventing adhesion formation, in decreasing pain, and in accelerating recovery. We moreover confirmed in the human the increasing CO_2 resorbtion during pneumoperitoneum, which Mynbaev et al. described in the rabbit (4), and the prevention by full conditioning.

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