Background and Goal of Study

- A sufficient laparoscopic workspace at a low abdominal pressure.
- What is the ideal patient’s body position to optimize workspace?

Results

- The ideal position, the trunk horizontal and the legs flexed, increased the abdominal volume by 1000 ml at 15 mmHg in comparison with the horizontal position without leg flexion.
- Reverse trendelenburg without leg flexion, the worst position, decreased the volume by 200 ml.

Conclusion

In laparoscopic bariatric surgery the legs should be flexed as much as possible to maximize the surgical workspace in anti trendelenburg position.

Materials and Methods

1. The pneumoperitoneum inflated volume at 15 mmHg was measured in 20 morbid obese patients undergoing laparoscopic surgery (and approved by the hospital ethical committee).

2. This measurement was taken with a) table horizontal, legs flat; b) table in 20° reverse Trendelenburg, legs flat; c) table in 20° reverse Trendelenburg, legs flexed 45° upward at the hips; d) table horizontal, legs flexed 45° upward; and e) table in 20° Trendelenburg, legs flat.

3. Trendelenburg is never used in upper abdominal laparoscopy but was also investigated.

4. The inflated volume at 15 mmHg was measured for each position and an analysis of variance was performed on repeated measurements.

References