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Background and Goal of Study

- Increase of the systolic arterial pressure (SAP)
 - to 140 mmHg at the end of the surgery
 - checking haemostasis
 - introduced at the beginning of 2008
 - gradual followed by all anesthesiologists.



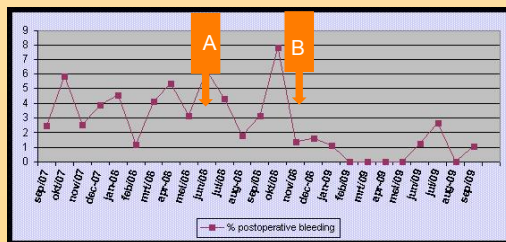
- Blood pressure rose
 - first by vaso active drugs
 - later by adding permissive hypercapnia.
- Detection of bleeding other hyper not treated. (1)

The aim of this study:

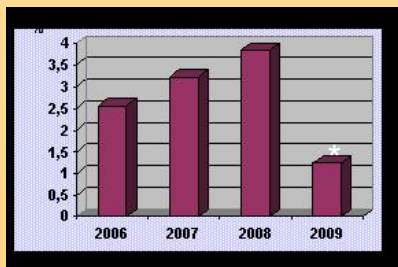
Retrospective analysis of increasing the SAP on the incidence of early postoperative bleeding.

Results

87 patients of the 3263 patients operated for lap-RNY between 2006 and sept 2009 developed post operative bleeding.



Monthly percent of patients with bleeding



Yearly percent of bleedings.

ANOVA test: * 2009 is significant different from the other years (p = 0.002)

Materials and Methods

- Restrospective review off all lap RNY
 - 01/2006 -> 09/2009: number of bleedings?
 - approval of ethical committee.
- Post operative bleeding first 48 hours (2,3)
 - Blood transfusion,
 - Surgical reintervention for bleeding
 Clinical signs: haemoglobine drop > 1 unit.

Discussion

- End 2008 (B) the incidence of bleeding dropped while blood pressure rise was introduced spring 2008 (A).
 - The systematic adaptation in every patient has taken more time.
- The method to raise blood pressure changed.
 - Vasoconstriction -> cardiac output rise.
- In the last years some other factors changed gradual like. (4)
 - Surgical removal of blood vessels close to the circular anastomosis
 - Changes in the quality of circular and linear staples.
- No causal relationship between SAP increase and drop in post operative bleeding can be made.
- Evaluation of the bleeding incidence when changing the medical protocol is important.

Conclusion

- ✓ Bleeding incidence dropped and should be monitored when protocol changes.
- ✓ No proof that SAP increase is reason for reduction but ethical approval for blinded RCT became impossible in our institute.
- ✓ The detection of extra bleedings when SAP rises and the drop in early post op bleeding are strong enough to keep new protocol.

References

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