Enhanced Recovery After Hysterectomy

av

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Akademisk avhandling

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Abstract


Objectives: To study recovery after hysterectomy under Enhanced Recovery After Surgery (ERAS) care, and in relation to different operation techniques.

Materials and Methods: An observational study was conducted comparing 85 patients undergoing hysterectomy with ERAS care to 120 patients immediately before establishing ERAS. In a prospective cohort study of 121 consecutive patients undergoing hysterectomy, the outcome was compared for patients with malignant versus benign indications. The main outcome measure was length of stay (LOS). A randomised controlled trial (RCT) of 20 women scheduled for hysterectomy compared robot-assisted laparoscopic with abdominal hysterectomy in terms of the development of insulin resistance, inflammatory reactions, and clinical recovery, and examined the relation to hormonal status. All studies were conducted in 2011–2015, at the Department of Obstetrics and Gynaecology, Örebro University Hospital, Sweden.

Results: Implementation of a structured ERAS protocol significantly reduced LOS compared to non-ERAS care. The effect was similar between patients with malignant and benign indications for surgery. No difference in complications was found. There was no difference in development of insulin resistance between robotic and abdominal technique, but clinical outcomes and inflammatory responses significantly favoured robot-assisted hysterectomy. Female sex hormone status was associated with the development of insulin resistance.

Conclusions: Recovery after hysterectomy can be influenced. ERAS care seems to be effective and safe. Clinical outcome can also be influenced by operational technique. Hysterectomy triggers a stress reaction in both the metabolic and the inflammatory system. It remains unclear why the reduced inflammatory reaction and favourable clinical outcome in robotic surgery were not mirrored by less insulin resistance. This could not be explained by female sex hormone status.

Keywords: Hysterectomy, ERAS, Insulin Resistance, Female Sex hormones.

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