

## Extracts from Pertinent Current Literature

### Safety of low-molecular-weight heparin during pregnancy: a retrospective controlled cohort study

*Galambosi PJ, Kaaja RJ, Stefanovic V, Ulander VM. Eur J Obstet Gynecol Reprod Biol. 2012 Jun 1*

**Source:** Department of Obstetrics and Gynaecology, Helsinki University Central Hospital, Helsinki, Finland.

The objective of the study was to determine the safety, of low-molecular-weight heparin (LMWH) administration during pregnancy, for the mother and the foetus both. In this retrospective controlled cohort study, 648 pregnancies exposed to LMWH were compared with 626 unexposed pregnancies. Principal characteristics, indications for LMWH use, and maternal and foetal complications were reported for each pregnancy. Data were obtained from patients' electronic hospital records and analysed using Statistical Package for the Social Sciences Version 17.0.

The results indicated that the incidence rates of various pregnancy complications did not differ between the two groups i.e. LMWH group vs control group for thrombocytopenia, preterm delivery, stillbirth, severe pre-eclampsia, foetal growth restriction, and antenatal bleeding. One

serious antenatal maternal haemorrhage occurred in the LMWH group, but this was unrelated to LMWH use. The caesarean section rate and the amount of bleeding during delivery were similar in the two groups.

The risk of major blood loss during labour (>1000ml) was not higher in the LMWH group compared with the control group. The allergic skin reactions were 0.3% in the LMWH group. No heparin-induced thrombocytopenia or symptomatic osteoporotic fractures were observed. Recurrent venous thromboembolic events occurred in 2.5% of patients in the LMWH group. To conclude, this study indicated that the use of LMWH is safe during pregnancy.

**Contributed by:** Dr. Ambreen Naveed Haq. Consultant Obstetrician and Gynaecologist. PAEC General Hospital Islamabad.

### Predictors of Successful Surgical Outcome in Laparoscopic Hysterectomy

*Twijnstra, Andries R. Bikkendaal, Mathijs D. van Zwet, Erik W. Van Kesteren, Paul J.M.de Kroon, Cor D. Jansen, Frank Willem Obstet & Gynecol. April 2012; 119(4): p 700-708.*

Laparoscopic hysterectomy has consistently gained popularity since its worldwide introduction to the surgical armamentarium since early 1990s.

Today, it is common knowledge that in cases of benign diseases, if the gold standard(i.e. vaginal hysterectomy) is for some reason not feasible, the

laparoscopic approach is superior and recovery period. In addition, patients claim to prefer this minimally invasive approach over abdominal hysterectomy for aesthetical reasons and because of recovery considerations.

However, the implementation of laparoscopic hysterectomy is slow and diffuse in the majority of countries, accounting for only 6-16% of all hysterectomies. This hampered implementation is assumed to be caused by a number of factors. Firstly, laparoscopic hysterectomy is considered to be an advanced laparoscopic procedure, which is thought to be characterized by a long learning curve. Moreover, the few studies that have attempted to describe this learning curve in laparoscopic hysterectomy have all been biased by their retrospective design and other methodological flaws. Chiefly based on complication rates or operative time, these studies state that the learning curve for laparoscopic hysterectomy is completed after approximately 30 procedures. As a result, the (end of the) learning curve in laparoscopic hysterectomy is not well-defined, whereas a clear definition is important both for training and for reasons relating to ethical and medico-legal issues. Second, probably partly because of the lack of consistent laparoscopic hysterectomy guidelines, performers, and their referring colleagues tend to disagree on the risk factors of laparoscopic hysterectomy. Regarding these risk factors (i.e. patient characteristics), an ongoing debate in the literature was noted on how the surgical outcome in laparoscopic hysterectomy is influenced by weight of the uterus, body mass index (BMI), and the

number of previous abdominal surgeries. Clearly, more evidence is needed to identify the risk factors that predict successful surgical outcome in laparoscopic hysterectomy and to assist gynaecologists in selecting and counselling patients who will benefit from the laparoscopic approach. Applying the data from this nationwide prospective study of cohort of gynaecologist who performed laparoscopic hysterectomies and an estimate of patient and surgeon factors, surgical outcome in laparoscopic hysterectomy was predicted. The procedures were corrected for multiple covariates in a mixed-effects logistic regression model. Furthermore, all primary outcomes were related to experience and the influence of individual surgical skills factors. One thousand five hundred thirty-four laparoscopic hysterectomies were analysed for 79 surgeons. American society of Anaesthesiologists, Physical Status classification, previous abdominal surgeries, and the type of laparoscopic hysterectomy mattered. Surgical experience also predicted the successful outcome of laparoscopic hysterectomy with respect to blood loss and adverse events ( $p=.048$  and  $.036$ , respectively) A significant improvement in surgical outcomes tends to continue up to approximately 125 procedures. Independent of surgical experience, an individual surgical skills factor was identified as odds ratio 1.67 and 3.60 for blood loss and operative time, respectively. In conclusion after adjusting for risk factors, it was shown that an increase in experience positively predicted a successful outcome in laparoscopic hysterectomy with respect to blood loss and adverse events. However,

the independent surgical skills factor shows a large variation in proficiency between individuals.

[The fact that a surgeon has performed many laparoscopic hysterectomies does not necessarily guarantee good surgical outcome.](#)

**Contributor: Anonymous**

---

## The Effects of Misoprostol on Postpartum Contractions: A Randomized Comparison of Three Sublingual Doses

---

*A Elati, Ms Elamahaishi, MO Elmahaishi, OA Elsrati, AD weeks. BJOG Volume 118, Issue 04, March-2011*

---

The objective of the study was to compare the postpartum uterine activity and side effects of various doses of sublingual misoprostol and intramuscular oxytocin. Initially 227 women gave their consent to participate in the study upon arrival in labour suite but 178 women were excluded because they had an augmented labour, caesarean section, or an instrumented delivery. Forty nine women were eligible to participate, 35 women were randomized to received 200, 400 and 600 mcg of sublingual misoprostol for PPH prophylaxis immediately following delivery. They were compared with 14 consecutive women, given 10 IU of intramuscular oxytocin. Immediately after placental delivery, a Koala intrauterine pressure catheter was inserted transcervically into the uterine cavity and uterine pressure was measured over 120 minutes. Other outcomes like temperature and measured blood loss were included. Women's

age, parity, gestational age and neonatal birth weight were not significantly different between the group which received IU of 10 intramuscular oxytocin and the group which received 200,400 and 600 mcg of sublingual misoprostol. Intramuscular oxytocin has the highest immediate postpartum uterine activity. There was no difference in intrauterine pressure between the three Misoprostol doses (200,400 and 600 mcg). A dose related rise in the body temperature and chills was observed in the Misoprostol. Clinical outcome with low dose Misoprostol should be further explored

**Contributed By: Dr. Sadia Khan, Assistant Professor, Dept of Obs/Gynae-I, Holy Family Hospital, Rawalpindi.**