

Secondary Haemorrhage following Total Laparoscopic Hysterectomy

Subash Rai,¹ Ganesh Dangal,¹ Aruna Karki,¹ Hema Kumari Pradhan,¹ Ranjana Shrestha,¹ Kabin Bhattachan,¹ Sunita Maharjan,¹ Sangam Rai¹

¹Department of Obstetrics and Gynaecology, Kathmandu Model Hospital, Bagbazar, Kathmandu, Nepal.

ABSTRACT

Hysterectomy is the most common gynaecological surgery. Hysterectomy is done by laparoscopic approach, open abdominal approach and vaginal approach. Laparoscopic approach has gained popularity among gynaecologists as well patients for its different benefits of minor perioperative complication, reduced intraoperative blood loss, and shorter period of hospital stay. However, there may occur some complications in laparoscopic hysterectomy which includes intraoperative organ injury, intraoperative blood loss, conversion into laparotomy, postoperative fever, surgical emphysema, port site infection, severe gastritis and haemorrhage. Similarly, we encountered a case of vault haemorrhage following total laparoscopic hysterectomy in our institution on 15th postoperative day leading to massive blood loss. Secondary haemorrhage is rare but occurs more often after laparoscopic hysterectomy than after other hysterectomy approaches. Secondary haemorrhage following total laparoscopic hysterectomy is an emergency condition and early diagnosis and prompt treatment is required.

Keywords: Complications; hysterectomy; secondary haemorrhage; TLH.

INTRODUCTION

Haemorrhage after hysterectomy is rare, but can be a life-threatening scenario. Secondary haemorrhage occurs in the interval of 3 to 22 days of hysterectomy. Overall incidence of haemorrhagic events after hysterectomy varies from 0.2% to 3.1%.¹ Secondary haemorrhage occur more often after total laparoscopic hysterectomy (TLH) than other hysterectomy approaches.² Incidence of secondary haemorrhage following total laparoscopic hysterectomy is about 1.3%.² Vault bleeding contributes most for secondary haemorrhage. Different factors like vault infection, vault hematoma, poor surgical technique, early resumption of physical activity may contribute to secondary haemorrhage.¹ Secondary haemorrhage may be presented as mild bleeding to severe bleeding with massive blood loss.

CASE

A 46-year female underwent TLH with bilateral salpingectomy in our hospital for Abnormal uterine bleeding (AUB)- Adenomyosis on 14th October 2022. She

was a known case of Anxiety Disorder under regular medication. Her intraoperative findings were normal, uterus was 10 weeks size, intraoperative blood loss was 100 ml. She was discharged on 16th October 2022 with an uneventful postoperative hospital stay. She presented in the Emergency on her 15th Postoperative day with chief complaints of heavy vaginal bleeding for 1 hour. She gave a history of passage of clots and her half of the bed mattress was soaked with blood. Her blood pressure was on the lower side, tachycardic and cold extremities. On per speculum examination, the vault was not visualised due to blood and clots. Vaginal packing was done due to continuous per vaginal bleeding and the patient was shifted to operation theatre for emergency exploration. On operation theatre, vaginal pack was removed and there was no active bleeding, suture was applied on vault to strengthen and secure the vault. Hemoperitoneum was ruled out with ultrasound and Diagnostic laparoscopy was done to rule out any bleeding source. Patient received two pints of whole blood intraoperatively and two pints postoperatively. Patient was discharged stable on the 4th postoperative day.

Correspondence: Dr Subash Rai, Department of Obstetrics and Gynaecology, Kathmandu Model Hospital, Kathmandu, Nepal. Email: shekharsubas@gmail.com, Phone: +9779841163597.

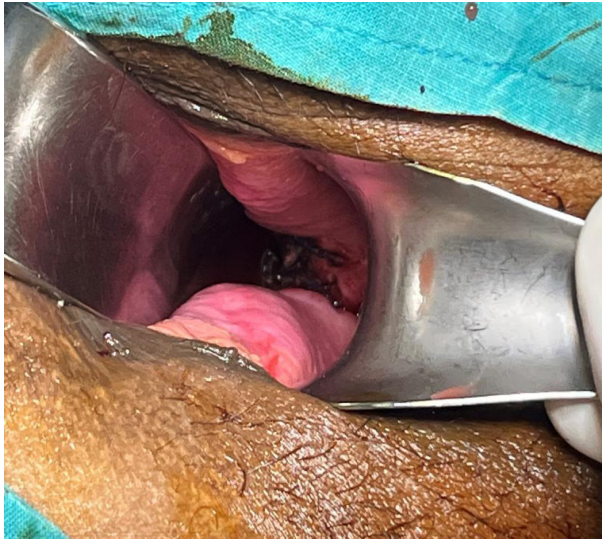


Figure 1. Bleeding from vault site.

DISCUSSION

TLH in comparison to other routes of hysterectomy is beneficial to patients regarding reduced overall perioperative complications, reduced blood loss, shorter hospital stay.³ Secondary haemorrhage is rare complication after hysterectomy and its incidence is more in TLH. The exact cause of increased incidence of haemorrhage after TLH is unknown, it may be hypothesised application of thermal energy to tissue causes more tissue necrosis and devascularization than sharp colpotomies in TAH and VH.² Secondary Haemorrhage may require vaginal packing, vault suturing, coagulation of uterine artery or even uterine artery embolization. In case of severe secondary haemorrhage, use of minimally transcatheter artery embolization (TAE) has shown great value.⁴ Laparoscopic approach is recommended if source of bleeding is not identified by vaginal examination or intra-abdominal bleeding is suspected.⁵ Severe haemorrhage, late arrival in hospital, and inability to timely diagnosis may be life threatening condition. Vaginal packing only is found to be sufficient in controlling secondary haemorrhage in many cases, in this case also vaginal packing had already stopped vault bleeding, vault suturing was applied just to make secure vault.

CONCLUSIONS

The laparoscopic approach for hysterectomy has gained popularity over other approaches for its benefits. Secondary haemorrhage is rare but occurs more often after laparoscopic hysterectomy than after other hysterectomy approaches. Secondary haemorrhage

with severe and active blood loss is an emergency condition and prompt identification of cause and source of bleeding and management accordingly is needed for saving a patient's life.

REFERENCES

1. Ancuța E, Zamfir R, Martinescu G, Crauciuc E, Sofroni D, Sofroni L, et al. Bleeding after Hysterectomy: Recommendations and What to. *Hysterectomy: Past, Present and Future*. 2022 Sep 7:69. doi: <https://doi.org/10.5772/intechopen.101384>
2. Paul PG, Prathap T, Kaur H, Shabnam K, Kandhari D, Chopade G. Secondary Hemorrhage After Total Laparoscopic Hysterectomy. *JLS*. 2014;18(3):e2014.00139. doi: <https://doi.org/10.4293/JLS.2014.00139>
3. Walsh CA, Walsh SR, Tang TY, Slack M. Total abdominal hysterectomy versus total laparoscopic hysterectomy for benign disease: A meta-analysis. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2009;144(1):3-7. doi: <https://doi.org/10.1016/j.ejogrb.2009.01.003>
4. Lee YJ, Kim MD, Lee JY, Kim SW, Kim SH, Kim YT, et al. Transcatheter arterial embolization for severe secondary hemorrhage after hysterectomy. *Journal of Minimally Invasive Gynecology*. 2018 Jan 1;25(1):180-5. doi: <https://doi.org/10.1016/j.jmig.2017.06.028>
5. Holub Z, Jabor A. Laparoscopic management of bleeding after laparoscopic or vaginal hysterectomy. *JLS*. 2004;8(3):235-238. [PM3016802]