EMERGENCY HYSTERECTOMY FOLLOWING FAILED UTERINE FIBROID EMBOLISATION: A CASE REPORT

Dr. Amanda Ifejika[1], Dr. Meera Mani [1]
[1]Department of Obstetrics and Gynaecology, Hornsby Ku-ring-gai Hospital, Hornsby, NSW

BACKGROUND

Uterine fibroid embolisation (UFE) is a minimally invasive procedure commonly used to treat symptomatic uterine fibroids. While generally considered safe and effective, UFE carries a risk of treatment failure often requiring further surgical intervention[1]. Hysterectomy is the definitive treatment for fibroid-associated heavy menstrual bleeding however, it is rarely performed as an emergency procedure for this indication. Here we describe an atypical presentation of a 50-year-old woman who underwent an emergency hysterectomy following severe haemorrhagic shock six months post-UFE.

CASE REPORT

A 50-year-old woman with a background of multiple uterine fibroids presented to the Emergency Department with a seven-day history of heavy menstrual bleeding and syncope. She had undergone bilateral UFE via the left radial artery approach six months prior.

On admission, she was hypotensive with a normal heart rate. Her abdomen was soft with no uterine tenderness but was grossly distended due to her large 26-week size multifibroid uterus. Laboratory investigations showed anaemia with a haemoglobin level of 67 g/L. Fluid resuscitation was initiated and she received a transfusion of four units of packed red blood cells. Despite medical management, the patient continued to show signs of haemodynamic compromise with a cumulative blood loss of 2.2 litres necessitating urgent hysterectomy.

Intraoperative findings included multiple uterine fibroids including a large 14 cm posterior submucosal fibroid occupying greater than 50% of the endometrial cavity with a polypoid extension protruding through the cervical canal. The patient was admitted to ICU post-operatively for further resuscitation and monitoring. She was discharged home on Day 5. Histological examination showed embolisation material within several large vessels of the myometrium and the large fibroid itself, however, there was no evidence of tissue necrosis.

DISCUSSION

In comparison to surgical management, UFE is associated with lower rates of blood transfusion, shorter hospitalisation, and faster resumption of daily activities[1]. Most patients (73-90%) report improvement of heavy menstrual bleeding symptoms at 1 year[2]. However, long-term follow-up shows an increasing need for re-intervention. Subsequent hysterectomy for failure or recurrence of symptoms following UAE was reported to be 27% at 5 years in a meta-analysis of four randomised trials. At 10 years, 35% required secondary hysterectomy[3].

Haemorrhagic shock requiring urgent hysterectomy is a rare complication post-UFE. A literature review of Medline and Google Scholar returned one result. Kerlan Jr et al. (2003) describe a similar case of a 48-year-old woman who underwent an emergency hysterectomy for massive vaginal haemorrhage one-month post-UFE[4]. Predictors of treatment failure are poorly understood but may include large fibroid size, subserosal or fundal fibroid location, poorly vascularised fibroids on contrast-enhanced imaging and unilateral UFE approach[1].

CONCLUSION

Further studies are needed to understand the risk factors associated with treatment failure allowing clinicians to be better equipped to counsel patients on available treatment options for the management of fibroids.

REFERENCES

1. Gupta JK, Sinha A, Lumsden MA, Hickey M. Uterine artery embolization for symptomatic uterine fibroids. Cochrane Database of Systematic Reviews. 2014(12).
2. Spies JB, Myers ER, Worthington-Kirsch R, Mulgund J, Goodwin S, Mauro M, FIBROID Registry Investigators. The FIBROID Registry: symptom and quality-of-life status 1 year after therapy. Obstetrics & Gynecology. 2005 Dec 1;106(6):1309-18.
3. van der Kooij SM, Bipat S, Hehenkamp WJ, Ankum WM, Reekers JA. Uterine artery embolization versus surgery in the treatment of symptomatic fibroids: a systematic review and metaanalysis. American journal of obstetrics and gynecology. 2011 Oct 1;205(4):317-e1.
4. Kerlan Jr RK, Coffey JO, Milkman MS, LaBerge JM, Wilson MW, Wolanske KA, Gordon RL. Massive vaginal hemorrhage after uterine fibroid embolization. Journal of vascular and interventional rdiology. 2003 Nov 1;14(11):1465-7.