

## Is the Logothetopolous pack useful in our practice?

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### Introduction

Haemorrhage is a known complication after hysterectomy. Various methods have been described to control this bleeding depending upon the cause. The Logothetopolous pack is a simple device used to control post hysterectomy haemorrhage. In this paper, we share our experience using the pack. This is an observational descriptive report of cases collected by the authors from January to December 2010.

### Case reports:

*Case 1:* A thirty-six year old grand multiparous (Para 8) woman was admitted at twenty-two weeks gestation with vaginal bleeding. On admission she was haemodynamically stable and her haemoglobin was 12 g/dl. On examination her abdomen was soft with no clinical evidence of abruption but minimal fresh vaginal bleeding was noted. The baby was alive on ultrasound examination and the placenta was occupying the lower pole covering the cervical os. Two hours after admission vaginal bleeding became profuse. A hysterotomy was performed to deliver the baby and try to control the bleeding. Placenta percreta was diagnosed intraoperatively, as the cause of the bleeding, and she underwent hysterectomy. Despite this, the bleeding continued. A Logothetopolous pack was used to control the bleeding and was removed after forty-eight hours.

*Case 2:* A fifty year old (Para 2) woman underwent vaginal hysterectomy for prolapse. Nine hours later she developed intra-abdominal bleeding and her haemoglobin dropped to 5.8 g/dl. An exploratory laparotomy and right uterine artery ligation was carried out in an attempt to control the bleeding. She was still having a significant amount of oozing which was difficult to control. We used a Logothetopolous pack for

forty-eight hours which controlled her bleeding successfully.

Postoperative febrile morbidity occurred in both patients, which was treated with antibiotics.

### Discussion

Haemorrhage is the major cause of severe maternal morbidity in almost all “near miss” audits in both developed and developing countries<sup>1</sup>. Post hysterectomy bleeding is a rare but significant cause for morbidity and mortality. This can be difficult to control due to friable tissues, co-morbidity or secondary coagulopathy. Gradual oozing from large, raw surface areas, venous plexuses and inaccessible areas of the pelvis can cause significant loss which is difficult to control especially with secondary coagulopathy.

Post-surgical packing is a simple old technique used to control haemorrhage. In 1926, Logothetopolous described a pack for the management of uncontrolled post hysterectomy pelvic bleeding<sup>2</sup>. This pack is also known as the mushroom, parachute, umbrella, or pelvic pressure pack<sup>3</sup>. The pack is made with long ribbon gauze tied end to end and packed inside a sterile plastic bag. The tail end of the gauze should come out of the bag as shown in figure 1.



**Figure 1.**

The pack is introduced trans-abdominally, and placed in such a way as to produce equal pressure over the oozing raw areas. The surgeon should take care to avoid any small bowel getting trapped behind the pack. The tail end of the intra-abdominal pack should protrude out through the vagina. Traction is applied by tying orthopaedic weights to the neck of the pack, then suspending the weights through a pulley. The pack can be removed transvaginally by gently pulling the tail end after forty-eight hours of application.

## Conclusion

The Logothetopulous pack is a simple technique which is easy to prepare and works well due to its tamponade action. It is a valuable surgical alternative giving time to correct coagulopathy. Prophylactic broad-spectrum antibiotic therapy should be considered to avoid febrile morbidity. We believe it is a safe and effective technique to control post hysterectomy haemorrhage, of which all Obstetricians and Gynaecologists should be aware.

## References

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