UTEROVAGINAL PACKING IN MASSIVE POSTPARTUM HAEMORRHAGE - A REAPPRaisal

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ABSTRACT
Objective: To study and evaluate the role of uterovaginal packing in arresting postpartum haemorrhage (PPH).
Design & Duration: Prospective case series from January 2005 to December 2006.
Setting: Gynaecology & Obstetrics Unit III, Civil Hospital, Karachi.
Patients: 108 patients who had postpartum haemorrhage with an estimated blood loss of more than 1500 ml.
Methodology: Detailed data of the patients was collected and entered on a performa, and analyzed. Uterovaginal packing of the PPH patients was done, and the outcome and complications were noted. Cases were followed up to one week in the hospital and up to six weeks in the Out-patient department.
Results: Out of the 42 patients who underwent uterovaginal packing, 36(86%) responded to the procedure; failure to achieve haemostasis occurred in 6(14%) cases. Caesarian hysterectomy was done in three (7%) patients, while one (2%) expired due to multiple organ failure.
Conclusion: Uterovaginal packing is a useful technique for control of massive postpartum haemorrhage. It is a simple, fast and cost effective procedure which can be easily taught to trainee residents for managing a life threatening emergency situation.

KEY WORDS: Postpartum Haemorrhage, Uterovaginal Packing

INTRODUCTION

Postpartum haemorrhage remains a major cause of maternal morbidity and mortality worldwide and is still an important issue even in the developed world. It is reportedly responsible for over 125000 maternal deaths and morbidity in 20 million women per year.

Massive postpartum haemorrhage is an emergency life threatening situation and an obstetrician's nightmare. Optimal management of these patients require multidisciplinary input from obstetrician, anaesthetist and haematologist. Recently several techniques have been tried to avoid hysterectomy, when uterotonic drugs fail to control massive post partum haemorrhage. These include surgical compression sutures like B-lynch brace sutures and Hayman's suture, and balloon tamponade with an intrauterine catheter with good results.

Uterovaginal packing by exerting mechanical compression of uterine vascular sinuses is a quick and effective method of securing haemostasis in a large number of cases. We report our experience in the use of uterovaginal packing for the management of massive postpartum haemorrhage.

PATIENTS & METHODS

In the Gynaecology & Obstetrics Unit III of Civil Hospital, Karachi, a tertiary care centre, uncontrolled postpartum haemorrhage either following vaginal delivery or Caesarian section was managed by uterovaginal packing, if medical management failed in arresting the haemorrhage. Even in older multiparous women, control of haemorrhage was attempted by uterovaginal packing in an effort to avoid hysterectomy.

In all cases the procedure was conducted by a consultant obstetrician or trained third and fourth year residents under general anaesthesia. Patients were examined in
the lithotomy position to exclude genital tract trauma, retained products of consumption or blood clots in the uterine cavity as a cause of bleeding. Vaginal speculum was then inserted, anterior lip of the cervix held with a sponge holding forceps and the uterine cavity packed firmly with sterile gauze starting from the fundus downwards.

Once uterine cavity was tightly packed, vagina was packed as well with about six inches of gauze hanging outside the vagina. Approximately 2-3 roles of gauze about 4 to 5 meters in length were used. Postoperatively important monitoring, replacement therapy and removal of pack was done after 24 to 48 hours. Postoperative complications were noted and patients were followed for up to six weeks in the Outpatient clinic.

RESULTS

During the study period 2266 deliveries were conducted in our unit. The frequency of major PPH (defined as blood loss in excess of 1500ml) amongst them was 4.8% (108 patients). Out of these, 42 patients underwent uterovaginal packing; 39(93%) cases were of primary PPH and 3(7%) of secondary PPH. Twenty seven (64%) patients had vaginal delivery while 15(36%) had Caesarian section. Their ages ranged from 18-42 years; most cases i.e. 31(74%) were between 25 to 35 years of age. Grandmultiparity was associated with haemorrhage in eight patients whereas 25(59%) patients had 1-3 children.

In this case series, uterine atony was associated with haemorrhage in maximum number of patients i.e 22 (52%). Other causes resulting in uterovaginal packing are shown in Table I. As regards to blood transfusion 13(31%) patients received five or more units and 10 (24%) 2-3 units of blood (Table II).

Uterovaginal packing was successful in 36(86%) cases but failed to arrest haemorrhage in six (14%). of which 3 patients (7%) underwent hysterectomy; one (2%) case expired due to disseminated intravascular coagulation and multiple organ failure.

DISCUSSION

The results of this study suggest that uterovaginal packing is a safe and effective measure for managing major PPH. This simple technique is cost effective, quick and easy to learn, especially by trainee residents and junior obstetricians, who in most instances will be the first ones to attend to the patient in this acute emergency.10,11

Unlike the B-Lynch compression suture12 or Haymans suture13, packing prevents a lower segment hysterotomy, when PPH occurs after vaginal delivery.12-14 Massive haemorrhage is often accompanied by coagulation failure,11-13 and in these circumstances temporary uterovaginal packing was seen to be a crucial factor in saving the life of the patient14, while replacement therapy was being arranged for and initiated especially in cases of abruptio placenta, eclampsia and viral hepatitis.

CONCLUSION

In our setup, with limited and overburdened resources and lack of personnel trained in invasive surgical procedures uterovaginal packing still retains an important role in emergency obstetrics.

REFERENCES


4. Wittich AC, Salminen ER, Hardin EL, Desantis RA. Uterine packing in the combined management

Table I. Indications for uterovaginal packing

<table>
<thead>
<tr>
<th>Indication</th>
<th>No.</th>
<th>%</th>
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<tbody>
<tr>
<td>Uterine antony</td>
<td>22</td>
<td>52</td>
</tr>
<tr>
<td>Placenta pravia</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Genital tract trauma</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Placental abruption</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Coagulopathy</td>
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<td>7</td>
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Table II. No. of transfusions required

<table>
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<tr>
<th>Transfusions</th>
<th>Pts. No.</th>
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<tbody>
<tr>
<td>1-3 units</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>4-5 units</td>
<td>19</td>
<td>45</td>
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<tr>
<td>&gt; 5 units</td>
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