Utilização do *damage control* na abordagem da hemorragia pós-parto grave

*Damage control in the management of massive postpartum hemorrhage*

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**RESUMO**

Paciente de 36 anos de idade evoluiu com atonia uterina, sendo submetida a histerectomia subtotal e ligadura de artérias ilíacas internas. O pós-operatório cursou com choque hemorrágico grave, acidose, hipotermia e coagulopatia. Foi necessária a realização de relaparotomia que mostrou 3 L de hemoperitônio e sangramento ativo no local da histerectomia. O sangramento foi controlado por tamponamento intra-abdominal e oclusão abdominal temporária. Após controle das condições fisiológicas da paciente, realizou-se relaparotomia para remoção do tamponamento abdominal e laparorrafia definitiva.

Palavras-chave: Histerectomia; Hemorragia Pós-Parto; Laparotomia.

**ABSTRACT**

A 36-year-old woman developed uterine atonia and was submitted to a subtotal hysterectomy and bilateral internal iliac artery ligation. At Intensive Care Unit the patient presented with a major hemorrhage shock, acidosis, hypothermia, and coagulopathy. A relaparotomy showed 3 L of hemoperitoneum and active bleeding from the hysterectomy site, which was controlled by intra-abdominal packing and temporary abdominal closure. After improvement of the patient’s physiology, a planned re-operative procedure was performed to remove the packs and definitive abdominal closure.

*Key words: Hysterectomy; Postpartum Hemorrhage; Laparotomy*

**INTRODUCTION**

Postpartum haemorrhage remains a significant contributor to maternal morbidity and mortality. Prevention, early recognition and prompt appropriate intervention are the keys to minimizing its impact. In essence, damage control equates with abbreviated surgery and restoration of near normal physiology, in a staged approach to a life-threatening injury. This manuscript reports a case of a patient with massive PPH that was controlled using the damage control concept by surgical gauze packing of the pelvis and laparostomy.

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**CASUISTIC AND CASE DESCRIPTION**

A 36-year-old woman, presented in labor to the emergency unit of the Gynecology and Obstetrics Department at 38 weeks of pregnancy with breech presentation. Her obstetrical history obtained by anamnesis and her documents revealed a patient with a history of three pregnancies ended by Caesarean Section (CS). The patient’s antenatal course revealed diagnosis of chronic hypertension and use of Methyl-dopa 500mg BID. The blood pressure measurement was 190/120 mm Hg. Vaginal examination revealed a closed cervix, no effacement or dilatation, and no bleeding or amniotic fluid leakage. Laboratory studies gave the following results: serum creatinine level 0.6 mg/dl; serum aspartate aminotransaminase (AST) level 40 U/L; uric acid level 6 mg/dL; hematocrit 35.2% and platelet count 173x10^3/mm^3. Catheterized urine showed no proteinuria.

**RESULTS**

A Caesarean Section, under spinal anesthesia, was carried out less than 60 minutes after admission. The placenta was strongly attached to the uterine wall. Manual removal with associated curettage was performed as attempt to extract the placenta. After the uterine incision was closed, no source of bleeding was found, and active bleeding had subsided. Blood loss was estimated to be about 800 ml and she was transferred to postanesthesia care unit. One hour later the uterus was noted to be lax with mild oozing per vaginum; the oxytocin infusion was increased to 20 units. Her vital signs were unstable and a laparotomy was immediately done under general anesthesia. At laparotomy, uterine atonia was diagnosed and a subtotal hysterectomy with bilateral internal iliac artery ligation was performed. At the end of surgery she had her vital signs stable and normal values of laboratory studies. The patient was transferred to the Intensive Care Unit (ICU) and 12 hours later presented with major hemorrhage shock (Hemoglobin 2.0 g/dl), acute renal failure (raise in creatinine level from 0.6 to 1.6 mg/dl), metabolic acidosis (pH 6.93; serum bicarbonate 5 Mmol/L; base excess -24 Mmol/L and lactate level 132 mg/dl), hypothermia (34.2°C at nasopharynx), diffuse coagulopathy (platelet count 24x10^3/mm^3; partial thromboplastin time showing no coagulation and fibrinogen level 92 mg/dl) and hiperkalemia (7.4 mEq/L). A relaparotomy was performed which evidenciated a 3 L of hemoperitoneum and an active bleeding from the hysterectomy site. The pelvis was packed firmly with three large laparotomy packs followed by temporary abdominal closure with a Bogotá bag in fifty minutes of operative time (Fig. 1).

**DISCUSSION**

The term “damage control” is an approach to patients with life-threatening injuries consisted by rapid surgical techniques to control of hemorrhage (intra-abdominal packing) and temporary abdominal clo-
CONCLUSION

The combination of hypothermia, coagulopathy and metabolic acidosis culminate in a fatal cycle when not interrupted. The “damage control” may represent a lifesaving measure in critical patients with critical severe postpartum hemorrhage.

REFERENCES