Service Priorities and Programmes

Electronic Presentations

Convention ID: 50
Submitting author: Dr Lai Ling CHAN
Post title: Resident, Kwong Wah Hospital, KWC

Are specific second line therapies replacing hysterectomy in managing massive primary postpartum hemorrhage?

Chan LL, Lo TK, Lau WL, Leung WC
Obstetrics and Gynaecology, Kwong Wah Hospital

Keywords:
Massive primary postpartum haemorrhage
Second line therapy
Uterine artery embolisation
Uterine compression suture
Balloon tamponade
Hysterectomy

Introduction

Primary postpartum haemorrhage (PPH) is the most significant cause of maternal morbidity and mortality in the world. According to the World Health Organization, PPH accounts for nearly one quarter of maternal deaths worldwide and for almost half of all postpartum deaths in developing countries. In Hong Kong, the incidence of severe PPH (defined as estimated blood loss ≥2000ml) in 2006-2010 had increased from 2.49 to 3.88 per 1000 births. The rate of peripartum hysterectomy in Hong Kong in 2006-2010 ranged from 0.55 to 0.68 per 1000 births. As of today, there has been no evidence to suggest any treatment is superior to others after failure of first line therapies like active management of third stage and uterotonic agents. The aim of this study is to analyse the rates of using second line therapies and their effects on maternal outcomes following massive PPH.

Objectives

To describe rates of use and success of second line therapies (uterine compression sutures, balloon tamponade and uterine artery embolisation, UAE).

Methodology

A retrospective cohort study of all women who delivered at gestational age ≥24 weeks and suffered from massive primary postpartum haemorrhage (blood loss ≥1500 ml) from 2006-2011, at Kwong Wah Hospital, Hong Kong. Cases were retrieved from the database. Medical records were studied. Data were entered in a standardised proforma and analysed in the IBM SPSS version 20.0. Success of treatment was defined as no escort to hysterectomy.

Result

There were 91 cases of massive primary PPH, giving a rate of 2.65 per 1000 births. The rate of peripartum hysterectomy was 0.38 per 1000 births. Second line therapy was adopted in 42 women, giving a rate of 1.23 per 1000 women delivering. Uterine

compression sutures had success rate 71% (95% CI 51-88%), balloon tamponade 82% (95% CI 59-100%), and UAE 75% (95% CI 39-100%). 21% of the women who received second line therapy required rescue hysterectomy. No hysterectomy occurred in the treatment group with use of two second line therapies. There was a rising trend of using second line therapies while hysterectomy and estimated blood loss were decreasing.