

EDITORIAL VIEW

Know your enemy and know thyself

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ABSTRACT

This editorial complements an invited review by Ghodki et al on 'Obstetric hemorrhage: anesthetic implications and management' in this special issue on 'Perioperative Management of Obstetric Emergencies'. The author emphasizes on the importance of understanding the pathogenesis, early recognition and adequate preparation in each type of hemorrhage. Newer therapies have been mentioned.

Key words: Hemorrhage, obstetric; Blood loss; Cesarean section

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The ancient Chinese military strategist Sun Tzu said 'Know your enemy, know yourself, and you shall not fear a hundred battles'. In this issue, Ghodki et al¹ review the nature of obstetric hemorrhage and strategies for its treatment.

First, it is necessary to understand how obstetric hemorrhage differs from other categories of hemorrhage. The authors summarize the differences in 4 points: inability to recognize risk factors; difficulties in accurately estimating blood loss; difficulties in achieving an early diagnosis; and the rich blood flow to the uteroplacental unit.

There are several types of obstetric hemorrhage; an awareness of each type is also important. Antepartum hemorrhage is defined as hemorrhage occurring after 24 weeks of gestation, but before delivery. Causes of antepartum hemorrhage include placental abruption and hemorrhage associated with placenta praevia. Careful anesthetic planning prior to Cesarean section is crucial in these patients, as the choice of anesthetic agent and the intraoperative treatment of blood loss have an important influence on outcome.

Intrapartum hemorrhage occurs in 1 in 2000 deliveries; the most common causes are abnormal placentation and uterine rupture.

Postpartum hemorrhage is defined as hemorrhage occurring after delivery. Postpartum hemorrhage may be caused by pathology of one or more of the '4Ts'²: tone, tissue, trauma, and thrombin. It is important to ascertain the cause of the hemorrhage and the appropriate treatment. Tone is necessary

for contraction of the uterus. Approximately 70% of cases of postpartum hemorrhage are considered to be secondary to uterine atony. The appropriate use of uterotonic drugs is important in the management of reduced uterine tone. Retention of tissue within the uterus will disrupt uterine constriction; in some cases, surgical treatment will be required. Trauma during the delivery may also cause postpartum hemorrhage. In this case, surgical treatment is generally required. Finally, thrombin is essential for the coagulation of blood. There are 2 types of coagulopathy; the first is due to consumption of coagulation factors, as occurs in placental abruption and amniotic embolism. Replacement of coagulation factors, including administration of fresh frozen plasma, is essential. The second cause of postpartum coagulopathy is dilution secondary to massive fluid infusion. In such cases, transfusion of red blood cells is essential.

Anesthetists have an important role in the treatment of obstetric hemorrhage, which includes taking on the role of medical team leader. In order to lead effectively, thorough knowledge, quick judgment, and communication skills are also necessary. Simulation training involving all medical staff, including those working in the operating theatres, those involved in blood transfusion services, and blood examination staff might be useful.

In summary, knowing the nature of the disease, knowing the strategy which we anesthesiologists have, and then treat the patients successfully. I am sure that this review will help us to improve maternal mortality.

Know your enemy and know thyself

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★★★★

BOOK REVIEW

Management protocols in SICU

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A very comprehensive collection of algorithms, guidelines and protocols, useful for intensive care, has been compiled by Department of Anesthesiology, Surgical Intensive Care Unit & Pain Management, Dow Medical College, Karachi (Pakistan) in a single book. 'Management Protocols in SICU' has been written to facilitate the daily running of the intensive care unit with a view to provide a ready to reach reference book for the residents as well as senior intensivists, and thus improve the healthcare provided to the patients. The book consists of 23 chapters, which contain relevant information about how-to-do from admission to ICU to general care; from nutrition to patients with systemic diseases, especially multi-organ failure patients. Special chapters have been included about protocols for obstetric and tetanus patients. As in most of our hospitals ICUs also cater for post-surgical patients as well, a chapter dedicated to this category has been included. The basic procedures to maintain homogeneity in critical patients, e.g. electrolyte and acid-base balance, have been described. Cardiac care has been adequately represented.

A full chapter has been reserved for ICU procedures. Brain death and withholding and withdrawal of life support therapy has been addressed. The last chapter is an extensive one and consists of a variety of topics from pharmacologic agents to hemorrhage and from interpretation of ABG's to ECG.

The book has been published on fine art paper and is spiral bound for easy reading. It has 123 pages. Although it is intended to be a text book, it is a useful addition to various ICU books already available in the market. It is suggested that the font size be improved to at least 11 in the next edition of the book for easy visibility. It may necessitate reformatting, and to opt for folded spread sheets instead of normal book size pages.

The copies of the book may be requested from the department or from B Braun, who are the sole sponsors of this book.

