## **Editorial**

Caesarean section is the most common abdominal operations carried out in obstetric practice. Rate of caesarean section has been gradually increasing globally; rate is higher in developing compared to developed countries. The World Health Organization (WHO) estimates the rate of caesarean sections 10% -15% of all births in developed countries. In developing countries the hospital incidence of LSCS varies from 35%-50%, the commonest indication now-a-days is post caesarean pregnancy and obstructed labour. Although this procedure has been performed safely for many years, as with any surgical procedure, there are risks involved. Compared to primary caesarean section multiple caesarean deliveries are associated with more surgical difficulties and increased risk of major complications. Sometimes there are dense adhesions which create difficulties for the surgeon, prolong the operating time with increased risk of injury to adjacent organs. Often there is oozing which remains unnoticed and internal bleeding continues. There is also increased risk of abnormal placentation with multiple caesarean deliveries.

Relaparotomy is a life saving emergency procedure, performed when the life of the mother is threatened. There are difficulties and complications associated with this procedure, not only due to the surgical technique, but also to the pre-, per-, and post-operation support needed for the patient. In poor settings, like developing countries, as the condition arises as emergency, these preparations are not ready or adequate, hence putting the patient in potential danger. Bangladesh is one of the countries where there is scarcity of efficient manpower, blood and blood products and equipments to deal with such emergencies. All these factors contribute to a possible high maternal and fetal mortality/morbidity.

Incidence of relaparotomy varies from 0.2%-0.7% of all caesarean sections. Post partum hemorrhage (PPH) due to uterine atony accounts for 50% cases of relaparotomy. The incidence of secondary PPH demanding relaparotomy is higher than primary PPH in some studies. Along with rising trends of caesarean section the incidence of secondary PPH following caesarean section is also increasing. Sometimes patients with previous C/S attend the hospital after home trial with prolong labour when infection is already established, lower segment becomes friable and often there is incomplete or complete rupture. In these cases primary surgery is often followed by sepsis,

secondary PPH, burst abdomen, internal haemorrhage/ haematoma formation requiring relaparotomy followed by obstetric hysterectomy. Conservative management like uterine massage, oxytosics, intra-uterine balloon catheter should be the first sort of management in primary PPH before attempting to relaparotomy. When conservative management fails, stepwise ligation of vessels, B-Lynch suture, bilateral uterine artery ligation, ligation of utero-ovarian anastomosis near uterine cornu, ligation of hypogastric artery, internal iliac artery has been recommended in several studies but has been found to be effective in 50% cases only.

Most of the time relaparotomy is performed when the patient's condition is too critical to withstand the risk of anaesthesia and repeat surgery. Before attempting to relaparotomy patient's condition needs to be reevaluated well. Often it is very difficult to take decision and needs good clinical judgment. It is a last resort to save mothers life sacrificing her reproductive capability sometimes in a very young age. Therefore these cases demand judicial decision, expert surgical team and good surgical technique to minimize haemorrhage and organ damage. Most of the time patients die from hypovolumic shock. Blood/blood products should be made available to prevent shock. Broad spectrum antibiotics should be used and facilities for ICU should be available.

Even in the developed countries the chance of dying from C/S is quite high compared to vaginal deliveries, 20/100,000. Lower rate of caesarean section can reduce the overall complications including relaparotomy. Every effort during C/S should be made to prevent the need for relaparotomy. In cases with prolonged labour, lacerations in the lower segment could be avoided by pushing the head up transvaginally during delivery of the impacted head. In cases of placenta praevia it is recommended to ensure proper haemostasis of the placental bed before closing uterine incision. Improvement of obstetric care with family planning, timely referrals, proper management of third stage of labor and backup services like blood bank and skilled personnel are the keys to manage this dreadful situation.

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