

Rare Case of Bull Gore Injury with Term Pregnancy

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Case Report

Abstract: Bull gore injuries are common feature among farmers and revelers in rural India ¹. Bull gore injuries are of varying severity, both penetrating and blunt types and at times lead to death. We present one such managed case of bull gore injury in a multigravida with term gestation where the gravid uterus sustained injury with no adverse perinatal outcome.

Keywords: Bull gore, penetrating injury, pregnant, uterine rents, live baby.

Introduction

The pregnant trauma patient presents a unique challenge because care must be provided for two patients—the

mother and the fetus. Care of pregnant trauma patients with severe injuries often requires a multidisciplinary approach involving an emergency clinician, trauma surgeon, obstetrician, and neonatologist. Fetal mortality and overall maternal morbidity remains exceedingly high (73% and 66%, respectively) following penetrating abdominal injury. **Petrone P, Talving P, Browder T, et al. Abdominal injuries in pregnancy: a 155-month study at two level 1 trauma centers. *Injury*. Jul 23 2010**



Figure 1: Bull gore injury to pregnant lady with loops of intestine



Figure 2: LSCS being done to extract the baby



Figure 3: A live baby after extraction. Suction being done



Figure 4: Two rents on the anterior aspect of uterus



Figure 5: Rents being sutured and hemostasis achieved

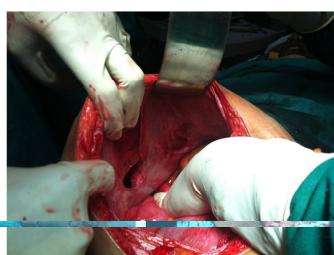


Figure 6: Two rents on the right subdiaphragmatic area

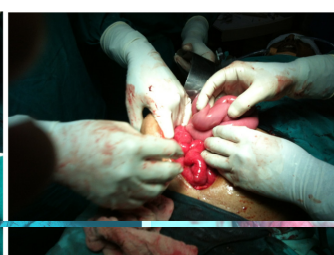


Figure 7: Bowels being explored, bowels normal

Case Report

A 30 yr old multigravida G₃P₂L₂ was brought to casualty after being gored by a bull. It was a penetrating injury to right lower abdomen and was sutured by a local doctor (fig 1.) and was referred for further management. Patient presented with severe lower abdominal pain. Initial assessment showed pulse rate 90/min, blood pressure recording of 110/70 mmhg. A sutured wound in right iliac fossa of 10*10 cm was seen. Term size uterus with regular fetal heart rate 136/min. Patient was in early labour at the time of admission. Decision for emergency

laprotomy made and patient was shifted to OT after preliminary work up and resuscitation. LSCS was done (fig 2.) and a live male baby was extracted (fig 3.). Baby had no external injuries. No evidence of abruption placenta noted. Two rents of 3*3 cm noted on the anterior wall of the uterus (fig 4), sutured and hemostasis achieved (fig 5.). Abdomen was explored and two rents 4*4cm noted on the right sub diaphragmatic region noted (fig 6.) sutured. Thorough inspection of the bowel loop made and no injuries were noted (fig 7.). No injuries to the vascular

structures were noted. Post operative period was uneventful.

Discussion

In India bull gore injuries are more commonly seen in rural areas. Dogan et al² in a study of injuries in animal husbandry concluded that bull gore injuries are the most common ones. Bull horn impact injury can vary from contusions, lacerations and penetrating wounds involving internal organs. The injuries occur more commonly on the abdomen and perineum.^{3,4} As pregnancy progresses, intra-abdominal organs change position, with important implications. Bowel is pushed upward by the enlarged uterus. Hence penetrating injury to the upper part of the abdomen is more likely to be associated with multiple gastrointestinal injuries. Organs involved in decreasing frequency are the small bowel, liver, colon, and stomach. During the third trimester, injuries to the lower quadrants of the abdomen almost exclusively involve the uterus. This may be advantageous to the mother because the uterus and amniotic fluid absorb most of the energy of the injuring object, resulting in less destruction to other organs. However, If the uterus is involved in penetrating trauma, fetal injury may occur in 60 to 90% of cases.

Awwad JT et al: High-velocity penetrating wounds of the gravid uterus: Review of 16 years of civil war, Obstet Gynecol 83:259, 1994. Multiple direct fetal, placental, and cord injuries have been reported as a result of penetrating trauma. An injury to uterus can rapidly change to a hypotensive emergency. It is difficult to know the size and depth of uterine rupture therefore the main principle guiding therapy must be that resuscitating the mother will resuscitate the fetus.

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