

CASE REPORTS

MULTIPLE RIB FRACTURE WITH SURGICAL EMPHYSEMA AT 34 WEEKS GESTATION

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ABSTRACT.

A case of multiple rib fracture with surgical emphysema following a road traffic accident at 34 weeks gestation is presented. She had spontaneous vertex delivery at 41 weeks gestation with good foeto maternal outcome. This is a case of severe injuries to the maternal trunk in which the uterus and / or the fetus were not affected.

KEY WORDS: Multiple rib fracture, surgical emphysema, road traffic accident, spontaneous vertex delivery, episiotomy.

INTRODUCTION.

Most reports showed that injury to one viscus in the trunk is usually associated with injuries to other viscera, and especially the uterus in late pregnancy, when the uterus is protruding through the anterior abdominal wall. We report here a case of severe injuries to the trunk in which the uterus and the fetus were not affected.

CASE REPORT.

This 30 year old multigravida was involved in a road traffic accident at 34 weeks gestation and was brought to the obstetric emergency unit in Aminu Kano Teaching Hospital, Kano, Nigeria, on 4th March, 1998. She was jointly managed by the obstetric and the surgical team.

On admission, she presented with a very sharp pain on the right chest wall and difficulty with breathing due to the severe pain. On examination she was in distress with tender swelling of the right chest wall posteriorly and reduced motion of the chest wall. There was no airway obstruction and further assessment excluded associated visceral injuries.

Abdominal ultrasound scan to excluded abruptio placenta and confirmed an intact uterus with a normal live fetus in cephalic presentation and a fundal placenta. Chest X ray done with abdominal shielding revealed multiple rib fracture involving the first to the eight ribs posteriorly on the right and surgical emphysema on the right chest wall. The lung fields were clear and the heart was normal. The diaphragm was intact and there was no mediastinal shift. (Fig. 1).

Surgical management was instituted and liberal

analgesics and intravenous fluids were given. Her pregnancy was managed conservatively and she went into labour on 26th April, 1998 at 41 weeks gestation with spontaneous vertex delivery of a live male baby, weighing 3.2kg, with the aid of an episiotomy. The liquor was clear and there was no retroplacental blood clots. Her post delivery condition was satisfactory and she was discharged by the obstetric team on the fifth day post delivery to continue on her surgical management.

Follow up review showed that the woman and her baby remained in satisfactory condition, and she was later discharged home by the surgical team when she had fully recovered.

DISCUSSION.

Most reports have agreed with the dictum that "injury to one viscus in the trunk is usually associated with injury to other viscera in the trunk, especially the protruberant uterus in late pregnancy" 1,2,4,5

This was not the finding in this case, where the patient sustained severe injuries to the trunk, i.e. multiple rib fracture with surgical emphysema at 34 weeks gestation with no injury to the uterus and the fetus in utero.

This report further confirms the protective effect of the uterine muscles, amniotic fluid, other abdominal viscera and the anterior abdominal wall on the fetus in utero. 1,3,4 It is the opinion of the authors, that this natural protection of the fetus in utero should not be underestimated.

Continued efforts to minimize road traffic accidents should be encouraged.

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