A case of Rectus Sheath Hematoma (RSH) mimicking Placental Abruption in a term pregnant woman

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Case - NB

- 30 yr old G2P1 (previous SVD with PPH + blood transfusion)
- Known Asthmatic (Seretide & Ventolin) and smoker
- Presented at 39w+6d gestation with right sided abdominal pain 3 hours prior to presentation
- Sudden onset few minutes after coughing, dull ache and severe
- She was very tender to palpate on the RUQ, Uterus soft and CTG normal.
- Musculoskeletal pain was initial diagnosis, analgesia prescribed
Case - NB

- Started contracting 1 hour later (2-3 contraction in 10mins moderate to strong)-on vaginal examination- 1 cm dilated—diagnosis of early labour-pethedine prescribed

- 3 hours later: very distressed with pain, tense abdomen (>>Right), tender++, scanned by Reg on call- FH seen, ant. Placenta, , small hypoechoic area seen on the right side of uterine wall ? Sub chorionic hematoma. VE-3cm, bulging membrane, CTG normal

- ? Abruption- transferred to MDU for ARM and continuous monitoring
Ultrasound

Eyes can not see what the mind does not know!!!
CTG

- ARM - large amount of liquor, small blood clots, CTG - after ARM became abnormal: BR - 160bpm, V - 5bpm, Variable decels, high head

- Decision for CS - ? abruption
Emergency Caesarean section

- Large amount of blood clots noted on opening the rectus sheath between the rectus muscle and the peritoneum
- No blood in the peritoneal cavity
- Fetus- healthy, Apgar 5, 9. PH 7.17 and 7.20
- Spinal to GA
- No evidence of Abruption
- Extensive large rectus sheath haematoma extending to the right costal margin
- Consultant Obs and General surgeon called, More blood clots removed from under the right rectus muscle and post rectus sheath, caused fresh bleeding
- Superior epigastric vessels retracted- difficult access.
- Many haemostatic sutures applied, drain inserted
- EBL 2500mls, had 2 units of RBCs and 2 FFPs
- Covered with antibiotics
Post-Natal Re-admission

- 8 days post EMCS Readmitted with
- Right sided abdominal pain, sore throat + fever - 37.7C - findings on US scan - 9.5cm x 5 x 16cm collection - possibly infected hematoma recollection

- Also positive for swine flu? Link to RSH pre-op

- US guided drainage done uneventfully + Antibiotics + analgesia
- Good post-Natal recovery. Follow up scan - stable residual hematoma - non symptomatic
US Scan Images
DISCUSSION

- Rectus sheath hematoma (RSH) is an uncommon, but not rare, cause of abdominal pain.

- Pregnancy is a risk factor for RSH.

- Pregnant patients have a reported mortality rate of 13%, with a 50% mortality rate for the fetus.

- RSH is usually not first consideration of acute abdomen in a pregnant woman but can mimic placenta abruption during labour in a pregnant woman.
RSH- Causes /risk factors

- Trauma
- Subcutaneous drug Injections e.g anticoagulant therapy

- Medical disorders like Collagen vascular disorder, degenerative muscle disease, Haematological disease, Hypertension

- It rarely occurs spontaneously, It usually occurs in the lower quadrants of the abdominal wall and almost never crosses the midline

- Vigorous contractions are often seen in strenuous exercise or repeated Valsalva maneuvers with severe coughing, vomiting, or straining at the stool
RSH

- Incidence: female to male ratio of 2-3:1

- Diagnosis:
  - US - 70% to 90%
  - CT (gold standard), with 100% sensitivity and specificity
  - MRI - whenever there is difficulty in distinguishing between a soft tissue tumor and RSH on the CT scan.
RSH- Conclusion

- Obstetricians need to be aware of RSH as a cause of abdominal pain in pregnancy.

- A careful history should include directed questions focusing on coughing, sneezing, constipation (straining at the stool), or exercise.

- In patients with certain medical problems, questions about recent, asthma exacerbation, bronchitis or upper respiratory tract infections may prove helpful.

- RSH can be a complication of chronic cough and swine flu in a pregnant woman even in a labour and this may mimic abruption.
References