INTRODUCTION
Unicornuate uterus with rudimentary horn is a rare type of uterine malformation associated with obstetrical complications. Rupture of pregnant rudimentary horn is the usual presentation resulting in severe haemoperitoneum with increased maternal morbidity, and at times, mortality.

A case of ruptured rudimentary horn pregnancy in a 24-year-old, second gravida, is reported. Exploratory laparotomy revealed a ruptured rudimentary horn pregnancy of 14 weeks gestation with haemoperitoneum. Excision of the rudimentary horn was done and an uneventful recovery followed.

CASE REPORT
A 24-year-old Omani patient married for 4 years was referred from a local health centre to Rustaq Referral Hospital with acute onset of abdominal pain and bleeding per vaginum for the last three hours. She was a second gravida at 14 weeks of gestation. Previous caesarean section for term breech presentation was done at another hospital as per the patient's history. No records of previous delivery were present with the patient. On arrival, the patient was afebrile. Heart rate was 110/minute. Blood pressure was 90/44 mmHg. Pallor was present. Abdominal examination revealed tenderness with guarding. Bi-manual pelvic examination revealed a soft cervix and size of uterus could not be made out. Bleeding per vaginum was present. Her laboratory investigations showed haemoglobin of 11.3g/dl with normal blood counts, urea, creatinine, electrolytes and coagulation profile.

Abdominal ultrasound revealed free fluid with fetus in the abdominal cavity without any cardiac activity. Patient was taken for emergency laparotomy after arranging 4 units of blood. On laparotomy haemoperitoneum was encountered. There was around 2000 cc blood in the abdominopelvic cavity with a dead fetus. Presence of ruptured rudimentary horn of uterus with placenta in situ was found. The ruptured rudimentary horn was bleeding profusely so excision of the horn was done. The left tube and ovary was attached to the uterus. Patient was managed initially in ICU and then shifted to ward. Patient had an abdominopelvic ultrasound to exclude any abnormality of urogenital system. She made uneventful recovery and was discharged after 10 days in hospital.

DISCUSSION
Pregnancy in the rudimentary horn arises either from a small communication with the uterine cavity or by transperitoneal migration of the fertilized ovum from the contralateral side. The usual outcome of the rudimentary horn pregnancy is rupture of the rudimentary horn with severe intraperitoneal bleeding and shock. Most pregnancies in the rudimentary horn rupture occur in the first or second trimester.

Early diagnosis of rudimentary horn pregnancy remains challenging. Few cases of early (first-trimester)
prerupture sonographic diagnosis of this condition have been reported.\(^5\) Fedele \textit{et al.,}\(^6\) have found ultrasonography as a useful tool in determining the presence of rudimentary horn.

In this case, the patient presented with acute abdomen pain but due to no medical record of previous pregnancy suspicion of rupture of rudimentary horn was remote. According to Shah and Khan,\(^7\) every pregnant lady with unexplained abdominal pain should be suspected to have ectopic pregnancy until proved otherwise. Soundararajan and Rai\(^8\) reported a case of rudimentary uterine horn pregnancy mimicking ectopic pregnancy, which was removed laparoscopically.

Developmental abnormalities of the urinary and genital systems can be explained because of the inter-twined development of these two systems. The close relationship between the development of the uterus and the urinary system explains the high incidence of uterine and urinary tract malformations. Radiographic contrast hysterosalpingography can also demonstrate congenital anomalies. However, it is usually only done as part of workup for the obstructed fallopian tube.

All cases of rudimentary horn pregnancy should be investigated for uterine anomalies, which varies widely from 1.8 to 37.6\%.\(^1\) Unicornuate uterus with rudimentary horn is a mullerian anomaly associated with endometriosis and pregnancy complications including miscarriages, ectopic pregnancy, uterine rupture, pre-term labour and malpresentations. All cases of uterine abnormalities should be investigated for any associated renal anomalies. Sonography of kidneys and intravenous pyelogram are recommended to rule out any abnormalities in the urinary system.

Although ultrasonography is reported to be a useful tool in diagnosing rudimentary horn pregnancy, this may not be the case in inexperienced hands. Criteria for early sonographic diagnosis of rudimentary horn pregnancy includes pseudopattern of an asymmetrical bicorunceous uterus, absent visual continuity between the cervical canal and the lumen of the pregnant horn, and the presence of myometrial tissue surrounding gestation sac.\(^9\)

Three dimensional ultrasound may be increasingly used for diagnosis of uterine abnormalities in the near future.

Laparoscopy is said to be the most accurate diagnostic tool by certain authors with significant advantages in efficient surgical management and therapy avoiding laparotomy.\(^10\)

Magnetic resonance imaging has proved to be a useful, non-invasive diagnostic tool for mullerian abnormalities\(^11\) but could not be done in this case due to the acute presentation requiring early laparotomy and proceed.

All cases of rudimentary horn pregnancy should be investigated for any associated renal anomalies. In this case, no associated renal anomaly was found after abdominopelvic ultrasound examination was done by the radiologist at the time of discharge.

\textbf{REFERENCES}