

CESAREAN SCAR PREGNANCY DIAGNOSTIC CHALLENGES AND MANAGEMENT OPTIONS : A CASE REPORT

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CASE SUMMARY OF CESAREAN SCAR PREGNANCY

PATIENT XYZ ,32 YEARS OLD ,G3P2 ,PREVIOUS 2 LSCS PRESENTED THROUGH OPD AT GESTATIONAL AMENORRHEA OF TWO AND HALF MONTHS WITH COMPLAINS OF PV BLEEDING FOR ONE DAY .SHE WAS MARRIED FOR 7 YEARS WITH LCB 2 YEAR

ON EXAMINATION ,VITALLY STABLE , ABDOMEN WAS SOFT ,NONTENDER, SYSTEMIC EXAMINATION UNREMARKABLE

USG FROM RADIOLOGIST REVEALED A SINGLE ALIVE FOETUS OF 11+ WEEKS IN A WELL DEFINED OVAL GESTATIONAL SAC IN LOWER UTERINE SEGMENT INSEPRABLE FROM THE SITE OF PREVIOUS SCAR WITH MYOMETRIUM THICKNESS 1.8mm .DIAGNOSIS OF CS PREGNANCY

- PATIENT WAS ADMITTED ,HER BASELINE IVESTIGATIONS DONE , BHCG DONE WAS 61402 mIU/ML.
- AFTER COUNSELLING MEDICAL MANAGEMENT STARTED.
- .INJECTION METHOTREXATE GIVEN ON 12-1-24 AND REPEATED ON 16-1-24.
- PLAN WAS MADE FOR LAPAROTOMY AND REMOVAL OF CESAREAN SCAR PREGNANCY.

- HER LAPAROTOMY WAS DONE ON 19-1-24.
- PEROPERATIVELY SHE HAD DIDELPHOUS UTERUS WITH LARGE HORN HAVING SCAR ECTOPIC PREGNANCY IN LOWER LEFT SITE. OTHER HORN RUDIMENTARY WITH ONE TUBE AND OVARY ATTACHED WITH EACH HORN.
- DEFICIENT MYOMETRIUM AT SCAR PREGNANCY SITE ,BABY AND PLACENTA WAS REMOVED ,UTERUS CLOSED ,HAEMOSTATIS SECURED.
- POST OPERATIVE PERIOD UNEVENT FUL DISCHARGED HOME ON 3RD POST OPERATIVE DAY WITH FOLLOW UP ADVISED.



CESAREAN SCAR PREGNANCY

IMPLANTATION OF PREGNANCY INTO THE MYOMETRIAL DEFECT OCCURRING AT THE SITE OF THE PREVIOUS UTERINE INCISION. [1]

- PREVALENCE 1 IN 2000 PREGNANCIES ENDS IN ONGOING VIABLE PREGNANCIES OR MISCARRIAGES.[2]
- FIRST CASE OF CSP REPORTED IN 1978.
- 13 % OF REPORTED CASES OF CSP MISDIAGNOSED AS INTRAUTERINE OR CERVICAL ECTOPIC PREGNANCY.
- LEVEL 4 MATERNAL HEALTH CENTRE IN THE UNITED STATES SEE LESS THAN 5 CASES OF CSP EACH YEAR.

INCREASE IN INCIDENCE OF CESAREAN SECTION ASSOCIATED WITH RISKS OF

- ❖ PLACENTA PRAEVIA
- ❖ PLACENTA ACCRETA
- ❖ CESAREAN SCAR PREGNANCY

• IF NOT DIAGNOSED AND MANAGED LEADS TO MATERNAL MORBIDITY AND MORTALITY.

PATHOPHYSIOLOGY

- IN CSP GESTATIONAL SAC IS COMPLETELY SURROUNDED BY MYOMETRIUM AND THE FIBROUS TISSUE OF THE SCAR.
- THE MOST PROBABLE MECHANISM IS THAT THERE IS INVASION OF THE MYOMETRIUM THROUGH A MICROTUBULAR TRACT BETWEEN THE CESAREAN SECTION SCAR AND THE ENDOMETRIAL CANAL.
- SUCH A TRACT CAN DEVELOP FROM TRAUMA OF OTHER UTERINE SURGERY , D&C ,MYOMECTIONY, METROPLASTY, HYSTEROSCOPY AND MANNUAL REMOVAL OF PLACENTA.[4],[5].
- NO CLEAR CO-RELATION BETWEEN RISK OF CSP AND THE NUMBER OF PREVIOUS CSESAREAN SECTIONS.

REFERENCES

1. Diagnosis and management of ectopic pregnancy: Green –top Guideline No.21 November 2016.

2. Cesarean scar ectopic pregnancies: etiology ,diagnosis, and management. Rotas MA, Haberman S, Levgur M. Obstet Gynecol. 2006;107:1373-1381

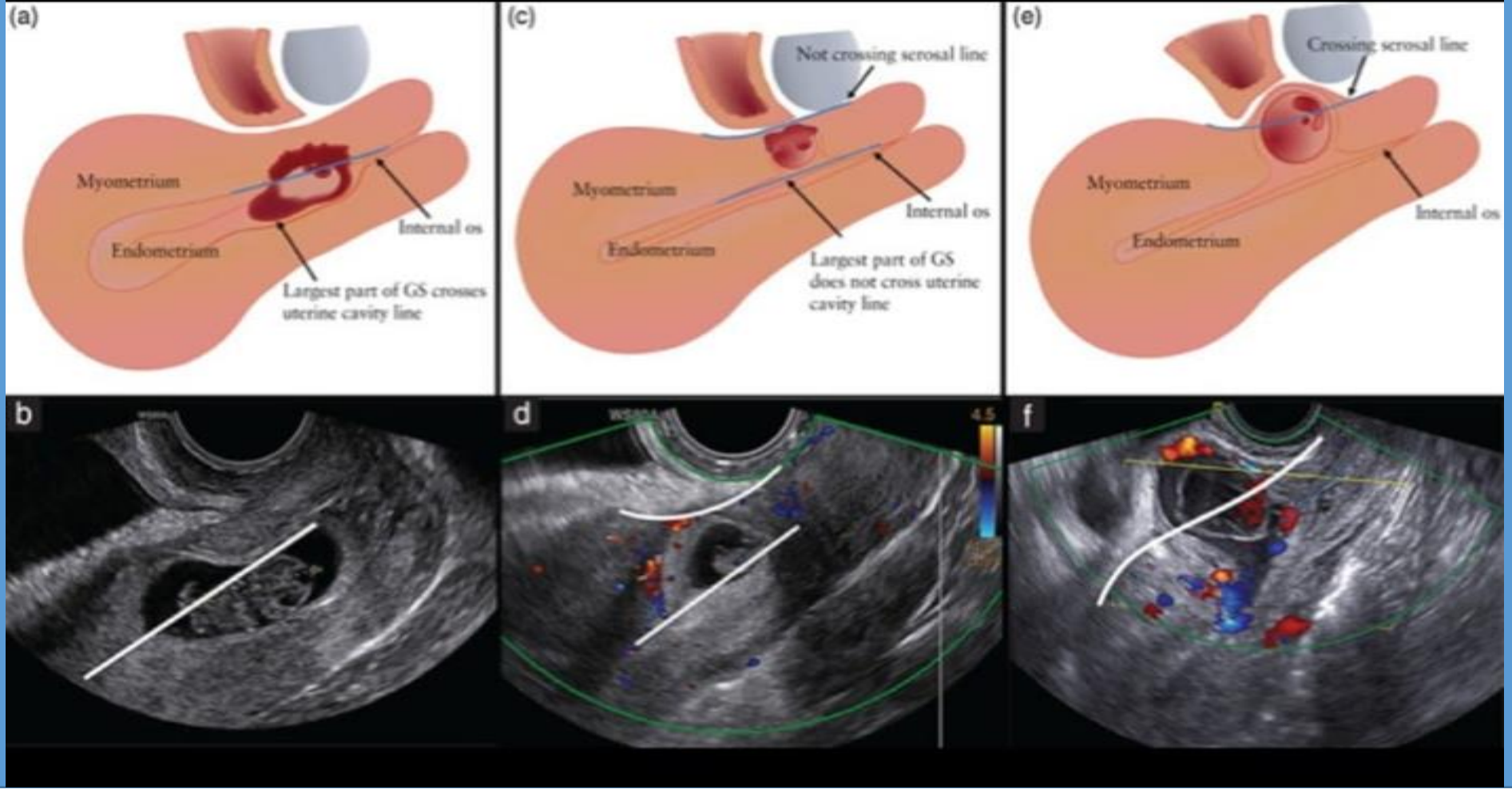
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4. Sonographic diagnosis of uterine defect in a pregnancy at 6 weeks gestation with a history of curettage .Cheng PJ, Chuch HY, Soong YK. Ultrasound Obstet Gynecol, 2003 ;21 :501-503

DEFINITION & SONOGRAPHIC REPORTING SYSTEM FOR CSP IN EARLY GESTATION BY MODIFIED DELPHI METHOD

- FIRST EVALUATION TO DETERMINE PREGNANCY LOCATION SHOULD BE PERFORMED AT 6-7 WEEKS USING TRANSVAGINAL SCAN.
- MRI NOT CONSIDERED TO ADD VALUE IN THE DIAGNOSIS OF CSP.
- CSP IS DEFINED AS A PREGNANCY WITH IMPLANTATION IN, OR IN CLOSE CONTACT WITH THE NICHE.
- CSP CAN OCCUR ONLY WHEN A NICHE IS PRESENT AND NOT IN RELATION TO HEALED CS SCAR.
- A NICHE IS THE PRESENCE OF A HYPOECHOIC AREA WITHIN THE MYOMETRIUM OF LOWER UTERINE SEGMENT ,REFLECTING A DISCONTINUATION OF THE MYOMETRIUM IN THE SITE OF PREVIOUS SCAR.
- NICHE IS ASSOCIATED WITH VARIOUS GYNAECOLOGICAL SYMTOMS LIKE ,ABNORMAL UTERINE BLEEDING ,PAIN, SUBFERTILITY , VAGINAL DISCHARGE .
- SYMTOMS SECONDRY TO NICHE IS GIVEN NAME CESAREAN SCAR DISORDER [7]
- LARGEST PART OF GS PROTRUDES TOWARDS THE UTERINE CAVITY.
- LARGEST PART EMBEDDED IN MYOMETRIUM BUT DOES NOT CROSS THE SEROSAL CONTOUR.
- GS IS PARTIALLY LOCATED BEYOND THE OUTER CONTOUR OF THE CERVIX OR UTERUS .[8]

➤ FURTHER STUDIES NEEDED TO VALIDATE THIS REPORTING SYSTEM AND TYPES OF CSP



MANAGEMENT APPROCHES

- LAPAROTOMY AND REMOVAL OF SCAR PREGNANCY AND RESUTURING TO REDUCE RECURRENCE AND LIMIT FOLLOW UP.
- UTERINE CURRETTAGE AS FIRST LINE MANAGEMENT DISCOURAGED AS IT MAY CAUSE BLEEDING AND UTERINE RUPTURE.
- HYSTEROSCOPY AND REMOVAL OF SCAR PREGNANCY UNDER DIRECT VISUALIZATION AFTER SUCCESSFUL MEDICAL MANAGEMENT.
- HYSTEROCOPY IN CONJUNCTION WITH LAPAROSCOPY IN CASES WHERE MYOMETRIAL THICKNESS IS < 3MM ON ULTRASOUND.

RECOMMENDATION

- INCREASE INCIDENCE OF CSP DUE TO RISING NUMBER OF CESAREAN SECTIONS
- HIGH INDEX OF SUSPICION REQUIRED FOR WOMEN SUGGESTIVE HISTORY OF CSP, ULTRASOUND IS THE DIAGNOSTIC TOOL OF CHOICE.
- MANAGEMENT OPTIONS INCLUDE ,MEDICAL ,SURGICAL, AND INTERVENTIONAL RADIOLOGY ,WITH APPROPRIATE PATIENT SELECTION FOR OPTIMAL RESULTS.
- RISK OF MAJOR HAEMORRHAGE AND HYSTERECTOMY REQUIRES ADEQUATE COUNSELLING, AVAILABILITY OF SURGICAL EXPERTISE AND BLOOD PRODUCTS FACILITIES SHOULD BE PART OF MANAGEMENT STRATEGY.

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