

RESEARCH ARTICLE

PLACENTA ACCRECTA SPECTRUM: A COMPREHENSIVE OVERVIEW

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Introduction:-

Placenta accreta spectrum (PAS) is a term used to describe a pathological condition characterized by abnormal adhesion of the placenta to the myometrium of the uterus. The severity of the invasion can vary widely, hence the term "spectrum (1)." Placenta accrete spectrum, pathological classification(based on dept of placental tissue penetration into uterine wall)- placenta accrete or adherent when the villi simply adhere to myometrium, placenta increta in case of invasion of villi into myometrium, placenta accrete spectrum classification based on extent of accrete area- Total, Partial, Focal (2). The increased rate of placenta accrete over the past few decades due to the change in risk factors like increa in number of caesarean sections, assisted reproduction technology(3),manual removal of placenta(7), myomectomy, uterine curettage(4). The most accepted theory is involving the endometrial-myometrial interface leading to dectivedecidualization in the scar area,leading to anchoring of placental villi to adhere abnormally to myometrium and further(6). Placenta accrete spectrum is considered as a high risk condiction according to ACOG and Society for Maternal – Fetal Medicine these patients should receive level(subspeciality) or higher care,multidisciplainary team(5).

Method:-

It was a retrospective case series report studied in a tertiary health care centre. All details were gathered from case sheets and intra-operatively. Patient characteristic including age, parity, chief complaints, gestational age, duration of complaints, morbidity, modetemination of pregnancy and maternal ouctome. Further examination, investigation and intervention were also studied.

Results:-

Case Report One:

A 25-year-old woman, G2P1L1, presented at 34weeks +2days gestation with pvbleedind for 1hr, evaluation was done –USG showing complete placenta previawith ?placenta accrete spectrum further evaluation was done- MRI pelvis showing cental placenta previacovering the OS with placenta accrete spectrum. The patient had previously undergone a lower segment cesarean section with a incision in per pevious pregnancy i/v/o malpresentation

Patient was heamodinamically stable and was conservatively managed. After extensive consultations, we reached a consensus regarding the mode of termination of pregnancy. Following a multidisciplinary case discussion, cesarean

section was scheduled at 37 + 0 weeks and prepared multiple units of blood and blood products. Due to second bout of bleeding and initiation of contractions patient was taking for emergency c-section at 35 weeks gestational age. C-section was done under general anaesthesia .On opening abdominal cavity uterine bulge was seen over uterine serosa ,indicating placental vili invasion to the uterine serosa, classical c-section was taken and baby was extracted. Placenta was carefully assessed it was observed that that the placenta had invaded into the uterine serosa .Detachment without removing the uterus was seemed impossibledue to severe bleeding, necessitating an immediate hysterectomy .

Throughout the procedure, there was 2000ml blood loss, the patient received three units of packed cells, three units of fresh frozen plasma (FFP), 1 g of tranexamic acid.

Postoperatively the patient was monitored in intensive care unit for 2days and discharged on 11th postoperative day in good maternal and fetalcondition with haemoglobin level of 10.7g/dl.

Case Report 2:

A24years old G3P2L2 presented at 26weeks + 0days gestational age with previous 2 LSCS with per vaginal spotting since 3hours, with moderate anemia with haemoglobin level of 9.7g/dl,inj. Ferriccarboxymaltose 500mg was given ,evaluation was done- USG showing placenta anterior with lower end of of placenta completely covering the OS, evidence of placental lakes noted, further evaluation was done- MRI diagnosed complete placenta previa with placenta accrete/increta.



Patient was heamodynamically stable and was conservatively managed, and was discharged on patients request and adviced to stay within 10km distance from hospital with 24 hours transport facilities, with a person available with her all the time. After an in depth study, implemented by multidisciplinary team including gynaecologist, radiologists, neonatologist, anaesthesiologists, elective caesarean section was planned at 36 weeks of gestational age.

Patient presented at 35 weeks + 5days gestational age with withper vaginal spotting since 3hrs, patient was haemodynamically stable .USG was repeated to look for further extent and depth of placental invasion-USG showing complete placenta previa with placenta accrete spectrum with partial placental invasion.C-section was done under general anaesthesia. On opening the abdominal cavity uterine bulge was seen, classical C-section was taken away from placental insertion and baby was extracted. Placenta was carefully assessed and its was observed that placenta had invaded uterine myometrium partially. Detachment of placenta was impossible due to severe bleeding, immediate hysterectomy was done taking risk of maternal morbidity and mortalility into consideration.



Throughout the procedure, there was 2000ml blood loss, the patient received three units of packed cells, three units of fresh frozen plasma (FFP), 1 g of tranexamic acid.

Postoperatively the patient was monitored in intensive care unit for 2days and discharged on 11th postoperative day in good maternal and fetalcondition with haemoglobin level of 10.7g/dl.

Case Report 3:

P2L2A1 with previous 2LSCS presented with complaints of pvbleeding sice 4hrs(soaked 2clothes) associated with passage of 2clots 3*3cm.evaluation was done USG shows- retainted products of concepation, further evaluation was done-MRI pelvis showing

Serum Beta hcg levels were done with value of 382Miu/ml with the levels showing increasing trend in every 48hrs sample

Patient continued to having pyspotting, with a second bout of bleeding on post admission day 3. Following multidisciplinary case discussion, exploratory laparotomy was planned and patient and patients attenders were counselled regarding the risks associated with it like risk of bladder injury, need of hysterectomy, intensive care, need of massive transfusion, associated morbidity and mortality, informed and written consents were taken.

Elective exploratory laprotomy was done under general anaesthesia in presence ofmultidisciplinary team abdomen was opened ,rectus muscle and peritompneum were adherent to anterior wall of uterus from fundus to istamus and completely adherent to urinary bladder, adhesions were released and sharp dissection was done between bladder and rectus muscle.bladder was pushed down and pushed with deversertractor.drak brown clour mass of 3*3cmm invading serosal layer of uterine istamus was noted (placenta percreta),wedge rection was done and all the placenta was removed from the cavity,hemostasis achieved



Throughout the procedure, there was 700ml blood loss, the patient received one units of packed cells, , 1 g of tranexamic acid.

Postoperatively the patient was monitored in intensive care unit for 2days and discharged on 12th postoperative day in good condition with haemoglobin level of 9.2g/dl.

Discussion:-

In last decade ,there is notable increase in caesarean deliveries and artificial reproductive techniques[2a]. In our study done in medical college, all cases were managed with multidisciplinary team compromising of obstetrician, anaesthetist, radiologist, paediatrician and blook blank as an absolute requirement in a patient with Placenta accrete spectrum.

In all the cases ,the occurance of invasive PAS was due to presence of uterine scar,which led to deeper invasion of placental villi.the incidence of placenta accrete spectrum with previous 1, 2, 3 LSCS is respectively. In our study all abnormall placental invasion is seen with previous 1LSCS with anterior placenta with placenta previa .USG signs of PAS can be detected as early as 18-24weeks of gestational age, hence placental localization is important during anomaly scan and in suspected cases serial follow up scans are recommended starting from 28 weeks to predicit depth and extent of invasion. The optimal time for delivery in case of placenta accrete spectrum PAS according to ACOG is 34weeks to 35+6weeks and according to RCOG is 35weeks to 36weeks+6days and according to FIGO is 37weeks gestational age for scheduled c-section provides the best fetal outcome. As all the cases presented before 37 weeks of gestational age with per vaginal bleeding, we dint have liberty of planned management. Considered obstetric hysterectomy gold standard for delivery of women with PAS.

The decision of fertility preservation overrided the need to prevent maternal morbidity and mortality. In this case series, all the patients had succesfull recovery and uneventful postoperative period.