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POSTER - OBSTETRICS (OBP)

Management of Severe RhD Isoimmunized Pregnancy by Intravenous Immune Glubulin Therapy and Fetal Monitoring by Doppler Middle Cerbral Artery Peak Systolic Velocity- A Case Report

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The case of 35 years old, G7P4A2L1 with previous 2 LSCS with Rh negative isoimmunized pregnancy is presented here whose husband blood group is O Positive (Homozygous). At 12 weeks period of gestation she had normal USG scan with ICT positive. At 17 weeks period of gestation patient had normal middle cerebral artery peak systolic velocity (MCA PSV) and ICT 1:1024. She was given IVIG 2 gram at 17+4 weeks POG and followed with 2 weekly MCAPSV. At 22 weeks she received second dose of IVIG 2 gram. She was followed with 2 weekly MCA PSV flows and serial USG scans till 33 weeks when she had MCA PSV in zone B (50-52 cm) with normal USG scan so an elective LSCS at 33 weeks was done and an alive male baby of weight 2.1 kg was delivered. Baby received exchange transfusion and phototheraphy in Nursery and discharged from hospital after 2 weeks.
Although intrauterine fetal transfusion has improved dramatically perinatal outcome in RhD alloimmunization, in some cases the fetus is affected before transfusion is possible. Recent reports have suggested that IVIG is very useful in the management of severe Rh immunization, and has even been used as the sole therapy in these very high risk pregnancies with a favourable outcome. Middle cerebral artery peak systolic velocity is used for fetal monitoring as it allows for non-invasive diagnosis by Doppler ultrasonography and is superior to amniocentesis in diagnosis of fetal anemia as reported by various studies. After reviewing the published literature with IVIG treatment in severe early – onset anti-D sensitization we propose that IVIG may have an adjunctive role in the treatment of severe Rh isoimmunization and emphasize the role of fetal monitoring by reliable non-invasive MCAPSV in diagnosis of fetal anemia.

Chemotherapy During Pregnancy - Fetal Consequences

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Introduction : Cancer during pregnancy is very rare. Overall reported incidence of malignant neoplasms in prenatal period is reported as 0.27 per 1000 live births. Although management of pregnant patient with cancer is difficult considering the toxic effects of chemotherapeutic drugs on fetus, we report 3 cases who received chemotherapy with no teratogenic effects to fetus.
Aims and Objectives : to study the effect of chemotherapy on pregnant patients with respect to any teratogenic effects to fetus.
Materials and methods : 3 patients out of which 2 with ALL and one with NHL were followed till term.
Results: two patients had Acute lymphobastic leukemia out of which one received oral 6-mercaptopurine 150mg daily and methotrexate 50 mg weekly from 2nd trimester (17 wk) onwards. The patient refused MTP once pregnancy was confirmed. Her level II USG was normal and she delivered at 39 wks. The other received adriamycin, vincristine and prednisolone in 3rd trimester (34 wks onwards). Her anomaly scan was normal. She went into preterm labor at 34 wks and delivered a healthy baby. The third patient received vincristine, prednisolone, cycophosphamide, hydroxyurea, for Non Hodgkins lymphoma at

18 weeks and then at 4 weekly interval. Anomaly scan was normal. She developed PIH with IUGR and was induced at 34 weeks.
Conclusion : Thus with close monitoring and in collaboration with medical oncologist, chemotherapy can be given during pregnancy without mutagenic effects on fetus, so as not to delay maternal therapy which is of equal importance.

Chorioangioma of Placenta: A Rare Cause of Non-Immune Hydrops Fetalis

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Objective: To discuss a rare case of chorioangioma of placenta presenting as non-immune hydrops fetalis (NIHF) its clinical and pathological features and outcome.
Introduction: Chorioangiomas are hamartomas derived from primitive chorionic mesenchyme. Commonest maternal complication is hydramnios reported in 30% pregnancies. Arterio-venous shunts in the tumor lead to fetal hypoxia, congestive cardiac failure, cardiomegaly and hydrops. Color flow Doppler helps in detection by demonstrating increased blood flow within the tumor. The clinical course of pregnancies associated with chorioangiomas depends on the vascularity of these tumors.
Treatment and outcome: Cordocentesis and intrauterine blood transfusion (IUT) given at 31 weeks. Course of steroids for lung maturity. Emergency LSCS done 2 days after IUT in view of poor biophysical score. Delivered a male baby, 1.52 kgs, hydropic with pleural and pericardial effusion. Baby ventilated and given 2 blood transfusions. Baby died on day 3 due to pulmonary hypertension.
Conclusion: In any patient presenting with signs of fetal non-immune hydrops, one must think of a possibility of an underlying placental cause.

Assessment of Fetomaternal Hemorrhage by Flow Cytometry and Kleihauer Betke Test in Rh-Negative Pregnancies

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Objective: To assess the efficacy of Flow Cytometry (FC) in the detection and quantification of fetomaternal hemorrhage (FMH) in comparison to the Kleihauer Betke test (KBT).
Material and Method: Twenty-five Rh-negative nonimmunized pregnant women who had delivered Rh-positive infants were included. Presence of FMH in maternal blood was determined predelivery and post delivery by manual KBT and FC using FITC labeled BRAD 3 antibodies.
Results: FMH was detected in 19 (76%) patients by FC and 23 (92%) patients by KBT prior to delivery, and in 21 (84%) patients by FC and 23 (92%) patients by KBT after delivery. The mean volumes of FMH in the pre-delivery samples by KBT and FC were 0.16 ± 0.17 ml and 0.07 ± 0.08 ml respectively. The mean volume of FMH in the post delivery samples by KBT and FC were 0.34 ± 0.26 ml and 0.37 ± 0.57 ml respectively. The volume of post-delivery FMH estimated by KBT and FC correlated well ($r = 0.75$; ICC a = 0.73).
Conclusions: Both manual KBT and FC using FITC-BRAD 3 antibodies showed good sensitivity in detecting and quantifying fetal red cells. Both the methods correlated well in detecting 0.1 to 0.5 ml of FMH.

Rh Isoimmunized Pregnancy with Aplastic Anemia with Tubercular Lymphadenitis

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Introduction: We report a rare case of Rh isoimmunized pregnancy with aplastic anemia with tubercular lymphadenitis with a successful pregnancy outcome.
Case report: Mrs. X, a 27 year old female G2P0+0+ 1+0 reported to our outpatient department at 30 weeks of gestation with Rh isoimmunized pregnancy (ICT titres 1:32). Patient had history of aplastic anemia for last three years and was on cyclosporine 100 mg bd. Patient also had history of tubercular lymphadenitis for which she was on ATT since June, 2005. Fetal ultrasound showed mild cardiomegaly with no hydrops. Intensive fetal monitoring was done using ultrasonic middle cerebral artery doppler and peak systolic velocity, which remained normal. She was induced at 37 weeks of gestation giving birth to a 2.065 kg female baby with PCV of 45 and Bilirubin of 1.0 mg % at birth. Baby received one intravenous immunoglobulins but did not require any exchange transfusion.
Conclusion: Rh isoimmunized pregnancy with aplastic anemia requires both maternal and fetal monitoring with intensive intrapartum monitoring for a successful pregnancy outcome.

Fetal Outcome in Congenitally Deaf Couple

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Introduction: About 1 child in 1000 is born with prelingual hearing loss of whom 50% have genetic causes. To provide genetic counseling to high-risk families it is necessary to establish genetic testing of "at risk" couples for the common deafness mutation prevalent in ethnic population.
Case report: A 30 year old, primigravida with congenital deaf-mutism whose husband and brother were also deaf-mute reported at 14 weeks of gestation. Her Pure Tone Audiometry showed bilateral profound hearing loss and her husband had bilateral moderate-severe hearing loss. On examination there were no other phenotypic features of syndromic deafness. Connexin 26 gene was screened for common mutations in husband and wife. No mutation was found. Patient regularly followed up for antenatal check up. Emergency LSCS was done at 38 weeks.
Newborn was screened for deafness by BERA which was found normal.
Conclusion: Babies born to congenitally deaf couples due to genetic causes have 10% risk of deafness. Mutation screening of at risk couples for common deafness mutation is warranted for genetic counseling. Newborn screening enables early diagnosis and better medical management.

Chorionic Villus Sampling: Experience at AIIMS

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Chorionic villus sampling (CVS) is a method of prenatal diagnosis performed early in pregnancy, after 10 weeks gestation. It allows early detection of abnormality hence termination of pregnancy can be offered for affected fetus earlier compared to other methods of prenatal diagnosis.
We analyzed the CVS done for prenatal diagnosis from July 2002 to December 2005 in a single unit in the department of Obstetrics & Gynecology at AIIMS. Total procedures done for prenatal diagnosis were 394. Of these CVS was the commonest (195 procedures) followed by amniocentesis (105),

cordocendesis (94). Thalassemia was the most common reason for CVS (121/195), other common indications were muscular dystrophies (33/195) and hemophilia(16/195) . There were no major complications.

Chorionic villus sampling is a common procedure for prenatal diagnosis and is safe in experienced hands.

Fetal Intrauterine Transfusion for Non Hydropic and Hydropic Disease due to Rh Isoimmunization

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Objective :- To evaluate the management of non-hydropic and hydropic fetuses, due to rhesus isoimmunization with fetal intrauterine transfusions.
Material and Methods :- This is a prospective (3yrs) and retrospective (5yrs) analysis of 180 rhesus-negative pregnant women presenting at our hospital with Rh isoimmunization during a 8 year period. All cases were managed with serial ultrasound monitoring with amniocentesis for spectrophotometry with Rh grouping, or cordocentesis for Hb/ hematocrit to decide or time intra uterine transfusion with the goal of delivery by beyond 34weeks of gestation.
Results :- Total 235 transfusions were performed on 103/180 cases (Hydropic 63, non-hydropic - 38), while rest 77 cases did not require IUT.
Transfusions were started as indicated, for hydrops fetalis or when cord blood hct. was less than 30, from 16-18weeks onwards by Intravascular (IVT - 135), intraperitoneal (58 - IPT, IVT + IPT (42) routes. Amount of blood transfused depended on period of gestation, fetal hct and presence of hydrops, ranging from 10-30ml to >110ml on various occasions. High dose maternal IVIG therapy was given to 63 cases. Intensive fetal monitoring was performed and pregnancy carried to > 33weeks in 92 cases, 31-32weeks in 33cases, 29-30weeks - 25cases, <28weeks - 24cases.
Live birth - hydropic group was 77%, non-hydropic was 96%. In non IUT group, 70/77 fetuses survival, fetal deaths occurred also due to other (non - Rh related) causes.
In conclusion, fetal IUT is life saving for Rh - isoimmunized pregnancies. Early onset fetal anemia and severity (presence of hydrops) are high risk factors.

Legal Aspects of Assisted Reproduction

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Objective: It is estimated that about 10% of the marriages have infertility problems. When various methods fail to cure infertility. Assisted reproductions or artificial conception is adopted. It involves using semen of husband or donor or pooled one. Further, wombs may be hired as in "Surrogacy". Nowadays patients are getting aware of their rights and many legal problems may arise. The doctors should be aware of various legal problems that may come up due to Assisted reproduction.
Method: Artificial conception is done through either artificial insemination or implanting fertilized ovum in uterus of mother. In surrogate mother, fertilized ovum in implanted in uterus of other lady who aggress for carrying pregnancy.
Asexual reproduction by cloning is highly controversial issue having many ethical & legal problems and separate subject itself.
Discussion: Assisted reproduction has many legal issues in relation to proper consent, legitimacy, nullity of marriage and inheritance which practicing doctors should be aware of.
Conclusion : In authors view all doctors practicing assisted reproduction should be aware of legal issues arising in day to practice from artificial conception.

Neonatal Outcome in Rh Negative Pregnancy

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The aim of the study was to evaluate the neonatal outcome of the Rh negative women delivered in Gauhati Medical College in the year 2005. Our study showed that the overall incidence of Rh negative pregnancies was around 1.8% with a morbity of around 21.7% and mortality rate showing 2.72% results showed that with good neonatal care much of the hazards of neonatal outcome of Rh negative pregnancies can be averted.

Cordocentesis for Prenatal Diagnosis: Experience at AIIMS

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Objective: To analyse the indications and complications of cordocentesis done for prenatal diagnosis.
Material: retrospective analysis of cordocentesis done for prenatal diagnosis from July 2002 to December 2005 in a single unit in the department of Obstetrics & Gynecology at AIIMS.
Results: Total procedures done for prenatal diagnosis were 394. Of these CVS was the commonest (195 procedures) followed by amniocentesis (105), cordocendesis (94). The common indications were congenital malformations (38/94, 40%), hemophilia (17/94, 18%), thalassemia (13/94. 13.8%). There were no major complications.
Conclusion: cordocentesis is an important tool for prenatal diagnosis in addition to chorionic villus sampling and amniocentesis.

Antenatal Management of Recurrent Osteogenesis Imperfecta in Developing Countries

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A twenty-nine year old women with $P_{2+0+0+1}$, with previous L.S.C.S with first baby affected by Osteogenesis Imperfecta and Hydrocephalous (died at the age of nine months) and second living baby affected by Osteogenesis Imperfecta type II received genetic counseling at various centers regarding future pregnancy. Prepared for expenditure of prenatal diagnosis and its consequences, the couple planned pregnancy, only to realize that the expenditure has not only increased but also has to double, because the sample of the effected child and CVS sample both need to be compared. We decided to follow up this patient with irregular cycles at our centre sonographically. At follow up at 20 weeks patient was suspected to have proximal fracture of femur, in the hands of one of the best sonographer at Delhi, but was thought to be nutrient artery of the bone by a local sonographer. The case is to be discussed on the lines of various aspects related to the entity relevant to a developing country like ours.

Diagnosis of Rh Negative Fetus in Rh Isoimmunised Pregnancy: Blessing in Disguise

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Objective: To present two cases of Rh isoimmunised pregnancy with antenatel diagnosis of Rh negative fetus on amniocentesis in last one year.
Case report -1: A 31 year old, X, eighth gravida , previous 1 preterm IUD and six second trimester hydropic fetuses presented in antenatal clinic in first trimester. fetus was monitered intensively with ultrasound for fetal anemia and middle cerebral artery peak systolic velocity. There was no evidence of anemia. At 33 weeks of gestation,ultrasound guided amniocentesis was done for PCR- blood group and spectrophotometry for bilirubin.AF was in Lilily zone I. Fetus was Rh negative . She was delivered vaginally at 38 weeks. Baby was male,Rh-ve, 2956 gms., with no features of anemia.
Case report -2: A 26 year old, Y , forth gravida, previous one early neonatal death & one preterm IUD, was intensively monitered by ultrasound & Doppler for feature of anemia till 30 weeks & 6 days, then amniocentesis done for PCR- blood group and spectrophotometry. Result showed Rh negative fetus in Lilily Zone I. She was delivered vaginally at 36 weeks & 4days. Baby wasmale,Rh-ve, 2868 gms., with no features of anemia.
Conclusion : Rh –ve fetus in Rh isoimmunised mother, diagnosed by AF- PCR is a real blessing.

Management of Early Onset Fetal Hydrops by Serial Blood Transfusions

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Introduction: Perhaps nothing has changed in the entire obstetrics as the management of a RH immunized fetus with the advent of intrauterine transfusions(IUT) .In this unusual case that we are going to present a woman delivered a healthy fetus with 7 serial intrauterine transfusions the earliest of which began at 21 weeks .
Case report: A 36 year old seventh gravida with RH issoimmunization and no living issue presented to us at 13 weeks . Fetal hydrops suddenly developed at 21 weeks POG .The first IUT was preformed as early as 21 weeks .She was monitored by serial ultrasounds for MCA PSV Doppler. She received 7 IUT's .She delivered a healthy baby at 35 weeks by an elective caesarian section done for breech presentation .
Conclusion: MCA PSV Doppler if done by experienced hands is highly reliable in monitoring RH issoimmunized pregnancy and predicting the onset of hydrops .The intrauterine transfusions early in pregnancy can provide hope of survival in pregnancy with early onset fetal hydrops.

Rubella Immune Status in Indian Women

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Objectives: To evaluate rubella immune status in indian women. (15-38yrs)
Method: This community and hospital based, cross-sectional study comprised of 330 indian women-230 nonpregnant and 100 pregnant women. elisa method was used to estimate the immune status (igg and igm) in their serum samples.
Results-overall seronegativity was 18.48% indicating high vulnerability to acquire rubella.the nonpregnant group showed 17.83% seronegativity whilst the pregnant women showed overall seronegativity of 20%.
Conclusion: high seronegativity and susceptibility to rubella was evident in both pregnant and non-pregnant women. Hence it is highly recommended to immunize all adolescent girls with rubella vaccine and screen all women for rubella before they plan pregnancy.

Predictors of Neonatal Outcome in Severe Preeclamsia Remote from Term

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Objective:. To analyze factors predicting neonatal survival in severe preeclampsia remote from term managed expectantly.
Patients and methods-25 pregnant women with severe preeclampsia between 27 and less than 35 weeks with live fetus managed expectantly were included in the study. An analysis of neonatal outcome was studied in two groups, Gr A comprising women with early neonatal deaths (n=6) and Gr B (n=19) women with surviviving neonates. Predictors of neonatal survival were compared and statistically analysed.
Results: The mean gestation at onset of preeclampsia in the two groups was 27±1.6 weeks and 30±2.3 weeks, however the interval from onset of preeclampsia to hospital admission showed significant difference (18±4 vs 8±4 days $p < 0.001$), suggesting delay in seeking hospital management. Maternal complications like eclampsia, uncontrolled BP was seen more frequently in Gr A as compared to Gr B (60% vs 35% $p<0.001$). An earlier termination of pregnancy was required in Gr A as compared to in Gr B (admission to delivery interval , 6±2 vs 19±4 days, $p<0.05$).The rate of intra uterine growth restriction on admission was significantly high in Gr A than in Gr B (100% vs 55% , $p<0.001$, OR 2.14). However, the rate of cesarean section in two groups was not found to be a factor affecting the survival (50% vs 16%). There was a significant difference in birth weights of the newborns in the two groups (1400±275 vs 1750 ±335 gms , $p<0.001$).
Conclusion: The neonatal outcome can be improved in severe preeclampsia remote from term if detected early and managed expectantly in a tertiary care centre.

Profile of Clients Attending Peri-Conceptional Care Clinic at AIIMS

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Peri-conceptional Care is preconceptional/pre-pregnancy care followed by Post-conceptional care.The concept, referrals and treatment policy for mother and child has not been studied in a tertiary care centre in India.The Pre-pregnancy visit may be the single most important health care visit when viewed in the context of its effect on pregnancy
Aims and Objectives
1.To study the concept, referrals and treatment policy of patients attending the Periconception clinic at AIIMS.
2. To provide periconception counseling for both high and low risk patents.
Methodology: The profile of patients referred to Periconception clinic are noted A health assessment questionnaire form is used as a screening tool. A detailed demographic, medical, obstetric, family, social, personal, contraceptive, environmental history is taken. This is followed by GPE, gynaecological & breast examination. The routine blood investigations along with special investigations as per history and examination are done
Results: A total number of 638 couples attended Periconception clinic AIIMS over a period of 5 years from 2000-2005.Out of 638 patients attending PCC AIIMS: 177 (27.7%) required referrals to other specialists for cardiac ailments (33),DM(39),HT (52), Hypothroidism(27),Epilepsy(18) and Renal disease(8). 80 (12.5%) were apparently healthy couples, 296 (46.4%) had previous BOH, 85 (13.3%) gave history of previous genetic disorder.
Discussion: There are potential benefits yet barriers to implementation Periconception care reduces unplanned pregnancies and improves outcome. In pregnancies associated with chronic medical and

genetic disease periconception care prevents complications at all stages and there is improved maternal, PN outcome and economic morbidity. Primary, secondary, tertiary, preventive strategies are offered with Periconception care.There is favourable pregnancy outcome in high risk women with HT\RD\Thyroid disease\HD{80%vs 40%] (Czeizel et al,1999) .For NTD, Preconception folic acid decreases 72% recurrence & prior first risk occurrence(Public Health Service Panel,1989). .PCC identifies problems affecting future pregnancy-Medical(95%),Genetic(52%),Nutritional(54%),HIV, Hepatitis B, Illegal substance and alcohol risk(Jack et al,1995).
Conclusions: Targeted genetic screening & counseling, invasive USG & PND techniques & timely referral is the key to good periconceptional care

Amniocentesis for Prenatal Diagnosis: AIIMS Experience

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Objective: To analyse the importance of amniocentesis as a procedure for prenatal diagnosis.
Materials & methods: Retrospective analysis was made of all amniocentesis done between July 2002-December 2005 in the department of Obstetrics and gynaecology unit I. The indication, results of the procedure and complications were noted. All procedures were carried out using 22/23 gauge spinal needle.
Results: Out of 394 prenatal diagnostic procedures, 105 amniocentesis were done. The major indications were Rh isoimmunisation (34.3%), positive Down's screen on triple test (17.14%), previous baby with downs syndrome (12.4%), advanced maternal age (.095%) and congenital infections (0.06%). The mean period of gestation was 20.46 weeks (range = 16 – 33 weeks). The mean POG for amniocentesis in Rh isoimmunised pregnancy was 28.33 weeks. Besides spectrophotometry amniocentesis was also used to determine fetal Rh type in 4 cases. Except for one all procedures were done in one insertion. No immediate or delayed complications were noted.
Conclusion: Amniocentesis is important for diagnosis of chromosomal abnormalities, blood group type and congenital infections. It is a safe procedure with minimal risk to fetal well being.

Outcome of Hydropic Babies: AIIMS Experience

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Background: Hydrops in neonates carries a variable prognosis depending upon the etiology, severity, duration and intensity of fetal and neonatal management.. Management of such cases in a tertiary level is a challenge and if the perinatal and early neonatal care is appropriate these cases can have a improved prognosis.
Objective: To evaluate neonatal outcome of hydropic neonates
Design: Retrospective descriptive study.
Setting: Neonatal division of All India Institute of Medical Sciences –A tertiary level NICU care center.
Subjects: 16 hydropic babies.
Period: January 2004 to Dec 2005.
Methods: Maternal and neonatal records were reviewed and the following data obtained: birth weight, gestational age, twinning, perinatal asphyxia and resuscitation required, respiratory distress and ventilation requirement, hyperbilirubinemia and its management, final outcome of the babies in terms of mortality. The data was analyzed for both immune and non-immune babies separately.
Results: Out of 3675 live births 16 babies were found to be hydropic (incidence: 4.3 per 1000 live births). Etiology of Hydrops included immune etiology in 11/16(68%) babies and 5/16 (34%) cases were labeled as of non-immune etiology. Mean birth weight of all cases was 1930 ± 513 gms and the

mean gestation age was 33.1 ± 2.9 wks. Twining was seen in 2 cases, Three (18%) of the cases were Large for date (LFD) and 1 (6%) was Small for date (SFD).Of all hydropic babies 7 (43%) were born by LSCS, 14(87%) needed resuscitation and 11(68%) had asphyxia.
During NICU stay 8 (50%) had hyperbilirubinemia and 8(50%) had respiratory distress, 10(62%) needed ventilation, 3(18%) needed TPN, 4(25%) needed blood transfusion and 5 (31.1%) needed exchange transfusion (all in immune group). 2 (12.5%) had intraventricular bleed and Periventricualr haemorragic infarct (PVHI).
Immune hydrops: Mean birth weight was 2025 ± 509. gms with mean gestation of 31.8 ± 2.35 wks, 3 (27.7%) were LFD with no multiple births. Mode of delivery was LSCS in 6(54.5%), 4(36.3%) 0f cases had a Apgar score of less than 3 at 1 min, 10(90.1%) needed resuscitation. Two babies (18%) were malformed. In the nursery, 6(54.5%) had respiratory distress needing Intermittent positive pressure ventilation (IPPV) , 7(63.6%) had hyperbilirubinemia – 5(45.5 %) needed exchange transfusion.5/ 11(45%) received IvIg and phototherapy .1(9.%) had a intracranial bleed and PVHI . The mortality in this group was 3(27%).
Non – Immune Hydrops: Mean birth weight was 1836 +/- 556.39 gms with mean gestational age of 34.4, +/- 2.33 wks, One case of non-immune hydrops was due to cardiac malformation (VSD and ASD) and another due to Noonan syndrome. In 5 cases 3(60%) cases of the non immune hydrops no cause was found.
(20%) was SFD with twin birth in one case. Mode of delivary was LSCS in 1(20%),
The survival was 73% in the immune group and 60% on the Non-Immune cases.
Conclusions: Rh isoimmunistion is the most common cause of hydrops in this series. Intensive fetal and neonatal management result in the favorable prognosis. These babies should be managed in a center with appropriate fetal and neonatal setup with Level III care. The survival in the immune group is better in comparison to non-immune group.

Optimizing Antenatal Care and Labor in Thalassemic Mothers: An AIIMS Experience

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Introduction: The beta Thalasemias are a markedly heterogeneous group of autosomal recessive disorders resulting from reduced beta + or absent beta 0 production of the beta globin chains, resulting in ineffective erythropoisis. Beta Thalasemias have a remarkably high frequency in Mediterranean, African-American, Southeast Asian groups. Three different clinical and hematological conditions are recognized, ie the beta thalasemias carrier state [heterozygous beta thalasemias], thalasemias intermedia, and thalasemias major. The latter two result from homozygosity or compound heterozygosity for beta thalasemias alleles. The best available estimates indicate that approximately 240 million people worldwide are heterozygous for beta thalasemias and at least 200,000 affected homozygous are born every year.
Aims & objectives: To evaluate the patients of Beta thalasemias who have undergone the pregnancy and labor at AIIMS and study the optimal management during antenatal period and factors affecting the outcome in these cases.
Material & Methods: All the pregnant mothers affected with beta thalasemias attending the high risk pregnancy clinic who are booked with us for delivery were evaluated retrospectively from Jan2002-Dec2005 [unit I] in the department of obstetrics and Gynaecology ,All India institute of medical sciences, New Delhi
Conclusions: Beta thalasemias minor is well tolerated in pregnancy. The pregnancy outcome and the obstetric complications don't differ from the general populations. Aggressive transfusion & iron chelation therapy has improved the life expectancy & fertility resulting in possibility of pregnancy in beta thalasemias major patients. Factors adversely affecting the outcome of pregnancy in beta thalasemias major and intermedia include presence of antibodies to obstetrically significant RBC

antigens, severe Diabetes mellitus, liver dysfunction, active hepatitis, myocardial dysfunction or HIV related infections. Significant enlargement of spleen, most common in beta thalasemias intermedia is associated with dystocia and hyperspleenism. Genetic counseling is an important aspect of prenatal care in these patients. Screening of the partner with MCV & hemoglobin electrophoresis should be offered. Preconceptional folic acid supplements should be recommended because of relative deficiency secondary to increase in erythropoisis may impose the risk of fetal neural tube defects.

Immune/ NonImmune Hydrops : A Dilemma in a Rh Isoimmunized Case with Type I Aortoarteritis

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Introduction: The abnormal collection of fluid in more than one area of fetal body is termed hydrops which is categorized as immune and non-immune. Resolution of majority of cases with immune hydrops occurs after intrauterine transfusions(IUTs). We report a case of immune hydrops refractory to IUTs
Case:This report describes a case of 21 years old Indian female who conceived after the diagnosis of type I aortoarteritis. She had a bad obstetrics history with only 1 living issue followed by 3 preterm IUDs. She was admitted at 25 weeks POG with fetal hydrops with Rh-ve ICT-ve. On investigations she was found to be Rh isoimmunised (ICT 1:512) and received 8 IUTs for fetal hydrops , last at 33wks POG. She developed gestational hypertension and was started on Tab Amlodepin 5mg OD. Emergency caesarean section done under GA at 33wks & 1day POG for Abruptio placenta with breech presentation. The postop course of the mother was uneventful with BP controlled on single drug.
The baby was admitted in NICU with gross hydrops & received 1 double volume exchange, IVIG and 9 PRPs for early onset thrombocytopenia. Hydrops improved with however persistence of hepatosplenomegaly, pancytopenia and hypertrophic cardiomyopathy. The baby was investigated for other causes of non immune hydrops but none were found.
Discussion: It is extremely uncommon for a fetus to have two separate conditions predisposing to hydrops fetalis. The treatment with IUTs result in a overall survival rate of 83% in fetus with Rh isoimmunization (90% in those without hydrops versus 73% with hydrops) .
Conclusion: In a case of resistant immune hydrops it is important to extensively investigate for the etiology of hydrops fetalis for a definite diagnosis and management.