ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

HAEMATOLOGICAL DISORDERS OF PREGNANCY- AN INSTITUTIONAL STUDY FROM SOUTH INDIA (ANDHRA PRADESH)

KEY WORDS:

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INTRODUCTION

- The haemoglobinopathies are autosomal recessive inherited disorders of haemoglobin synthesis (thalasemmias) or structure (sickle cell disorders) .
- Responsible for significant morbidity and mortality on a worldwide scale .
- Increased migration of the world's population and inter-ethnic mixing has made their prevalence in UK and North America
- Incidence of thalassemia trait and sickle cell haemoglobinopathy in India varies between 3-17% and 1-44%.
- In the Indian subcontinent ,there are marked differences in prevalence existing within regions (5%-15%).
- Thrombocytopenia is the second leading cause of blood disorders in pregnancy after anemia in which gestational thrombocytopenia accounts 70-80% of all cases .
- Blood dyscrasias have a conflicting maternal and perinatal out come.

AIM

- To evaluate pregnancy outcome in blood dyscrasias patients (7) that were reported to the OBGY department in our Hospital.

MATERIAL AND METHODS

TYPE OF STUDY: Retrospective observational study from june 2017-September 2018.

- **Inclusion criteria:** All antenatal women with anemia not responding to routine management
- **Methodology :** women who did not respond to our standard treatment evaluated with sickling tests and hemoglobin electrophoresis
- Partner was also screened by electrophoresis .

	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7
AGE	23 YRS	23 YRS	30 YRS	20 YRS	21 YRS	22 YRS	24
PARITY	Primi	G3P1L1 D1	G4P1L1A2	Primi	Primi	G2P1L1	G2A1
BLOOD DYSCRASIA	Beta thalessemia trait	Beta thalessemia trait	Beta thalessemia trait	Beta thalessemia trait	HbE variant	Sickle cell anaemia	ITP
HUSBAND ELETROPH ORESIS	normal	normal	normal	normal	normal	normal	
NO. OF BT IN PRESENT PREGNANCY	1	2	2	2	3	2	SDP&RDP
FAMILY	Nil	Nil	Nil	Nil	Nil	Nil	Nil

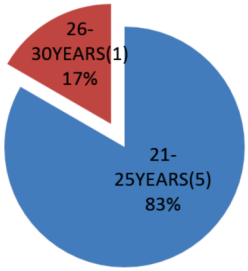
	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7
Pregnancy Outcome	Em lscs Ind-contra cted pelvis	Normal vaginal delivery	Normal vaginal delivery	Ventous e assisted vaginal delivery Ind – poor materna l forces	Em lscs Ind -fetal distress	Repeat elective lscs	Normal vaginal delivery
Fetal Birth Weight	2.68kg s	3.1kgs	2.72 kgs	2.97kgs	3.2 kgs	2.56 kgs	2.5kg

PRESENTATION OF CASES

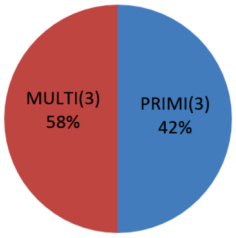
Patients presented with complaints of weakness, easy fatigability, anemia not responding to iron supplementation.

Anemia evaluation was done in all the cases: Complete blood picture i.e Hb, TC, DC, PCV, MCV, MCH, MCHC, reticulocyte count peripheral smear(for abnormal blood cells), stool for occultblood, ova, cyst, parasite.

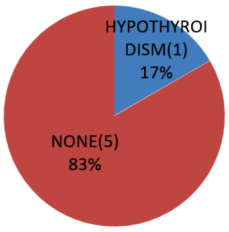
AGE



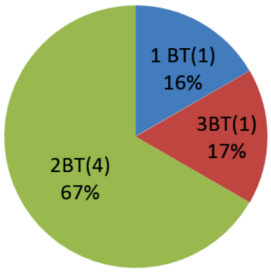
PARITY



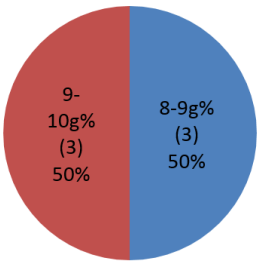
ASSOCIATED MEDICAL DISORDERS



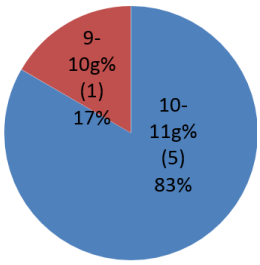
PREVIOUS H/O BLOOD TRANSFUSION



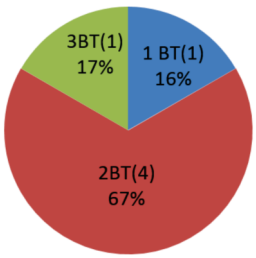
HB @ 1stVISIT



HB @DELIVERY

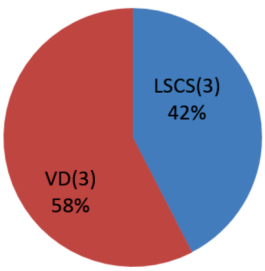


BLOOD TRANSFUSION IN PREGNANCY



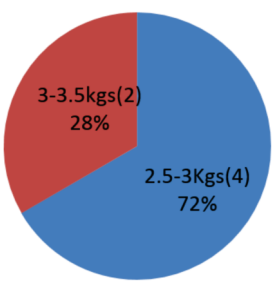
Blood transfusions done in 42% of the cases ,RDP and SDP given in patient ITP.

PREGNANCY OUTOME



Cesarean section – 4 Obstetric reasons

FETAL BIRTH WEIGHT



RESULTS

- Prevalence of blood dyscrasias in antenatal women at our tertiary referral center were 0.58%in which 85%were hemoglobinopaties and 14% were immune thrombocytopenia .
- Thalassemia minor and SCT were noticed in our study
- Commonest complaint: weakness, easy fatigability, anemia not responding to iron supplementation
- Most of the blood dyscrasias in pregnancy noticed in my study was of milder varaiants and pregnancy outcome were uneventful.

DISCUSSION

- Maternal medical complication like PE is common noticed in our study
- Fetal complications like IUGR, Prematurity oligohy dramnios , need for Nicu admissions which were common.
- Increased need for blood transfusion.

CONCLUSION

- Ignorance towards health make some haemo globino pathies undiagnosed
- As anemia can be of a mild degree or absent their pregnancy's will usually be uneventful and normally completed
- Detailed examination peripheral smear, in anemic women who do not respond to routine haematinics can raise an alarm of blood dyscrasias.
- Understanding the pathophysiology of disease and complications of haemoglobinopathies is essential.
- Avoid over loading the women with iron if they fail to respond with hematinics
- More frequent antenatal visits,blood pressure and proteinuria, growth of the fetus should be assessed at each visit
- Women with pre-existing proteinuria or known renal impairment will require more frequent monitoring
- Timely intervention improves maternal and fetal outcome.
- Multi disciplinary approach and collaboration with hematologist, blood bank and physician improve maternal and fetal outcome.
- Medical disorders emphasises the need of multi disciplinary management
- Differentiation between gestational and idiopathic thrombocytopenia in pregnancy is difficult.
- Usage of corticosteroids is the firstline of treatment
- Other treatment options include – platelet transfusion, plasmapheresis, intravenousimmun oglobulins
- Intrapartum managemnt- stress dose of steroids,avoid instrumental delivery,
- Postpartum management- evaluation of the baby

DISCUSSION

- This study had normal outcomes in thalassemia trait pregnant women, compared to Sheiner E, Levy A, Yerushalmi R et.al. study has shown an increased risk of IUGR (OR 2.4) and oligohydramnios(OR 2.1).[5]
- Nassar AH et.al. investigating pregnancy outcome of patients with -thalassemia minor found higher rates of cesarean delivery.[6]
- The largest case series of Thalassemia pregnancies reported IUGR in 22% of pregnancies[7]which is unlike my study.[89]
- There is no evidence of increased obstetric complications in my study similar to Daskalakis et. Al. and Jensen et. Al. studies, that included a total of nine pregnancies with Thalassemia.

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