



A CLINICAL AUDIT OF INTRAHEPATIC CHOLESTASIS OF PREGNANCY AND OUTCOMES IN INDIA



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AIM

A clinical audit to study the maternal and perinatal outcomes in ICP in a tertiary level hospital in India

INTRODUCTION

Intrahepatic cholestasis of pregnancy (ICP)
Medical condition in pregnancy
Main risk – stillbirth
Diagnostic criteria
Pruritus
serum bile acid (SBA) $\geq 10 \mu\text{mol/L}$
Alanine transaminase (ALT) Serum glutamate pyruvate transaminase (SGPT) $>30 \text{ U/L}$

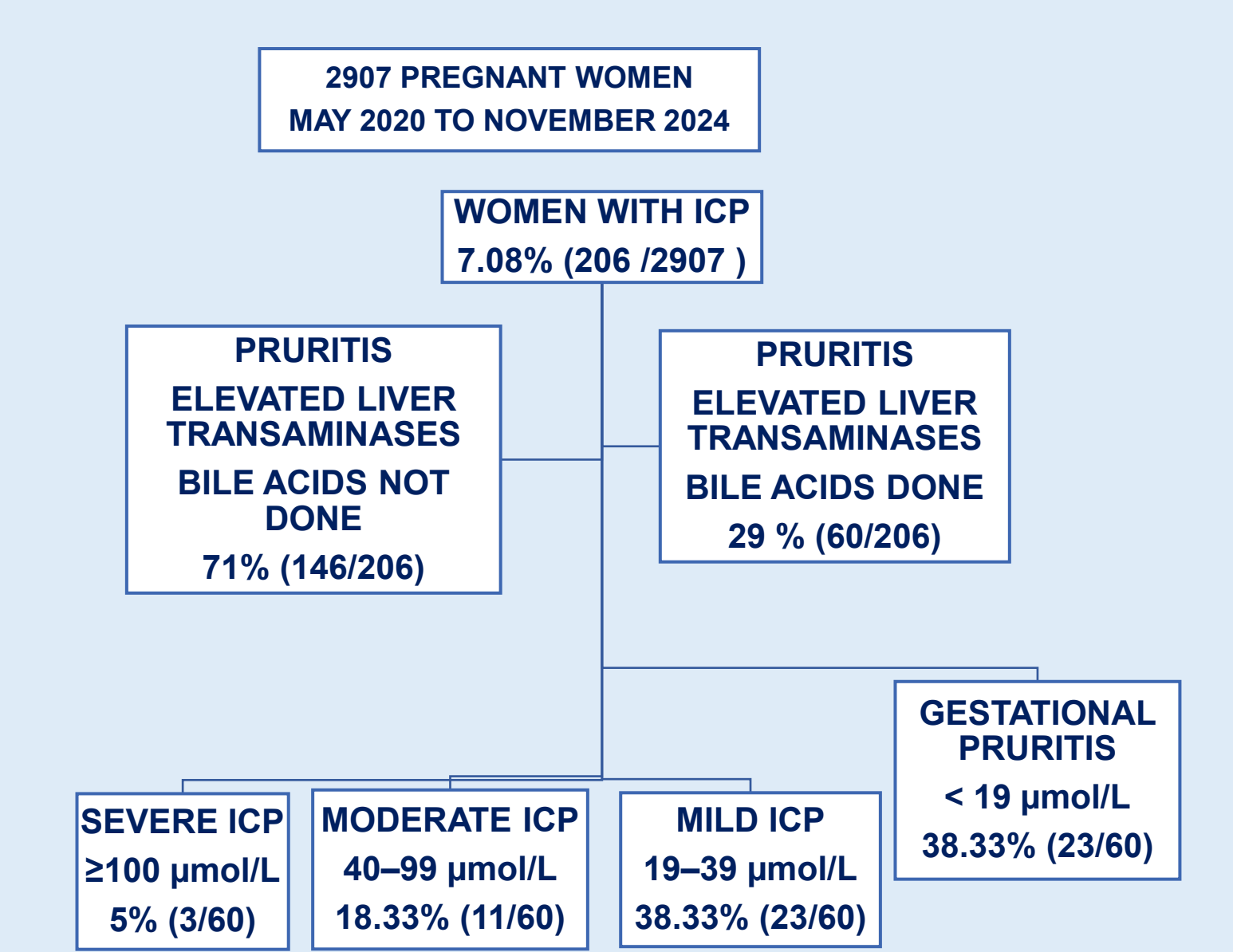
MATERIAL & METHODS

INCLUSION CRITERIA
Pruritus
elevated liver transaminases
elevated serum peak bile acids
singleton pregnancy

EXCLUSION CRITERIA
Prior liver disorder
Hepatotoxic drugs intake
Multiple pregnancy

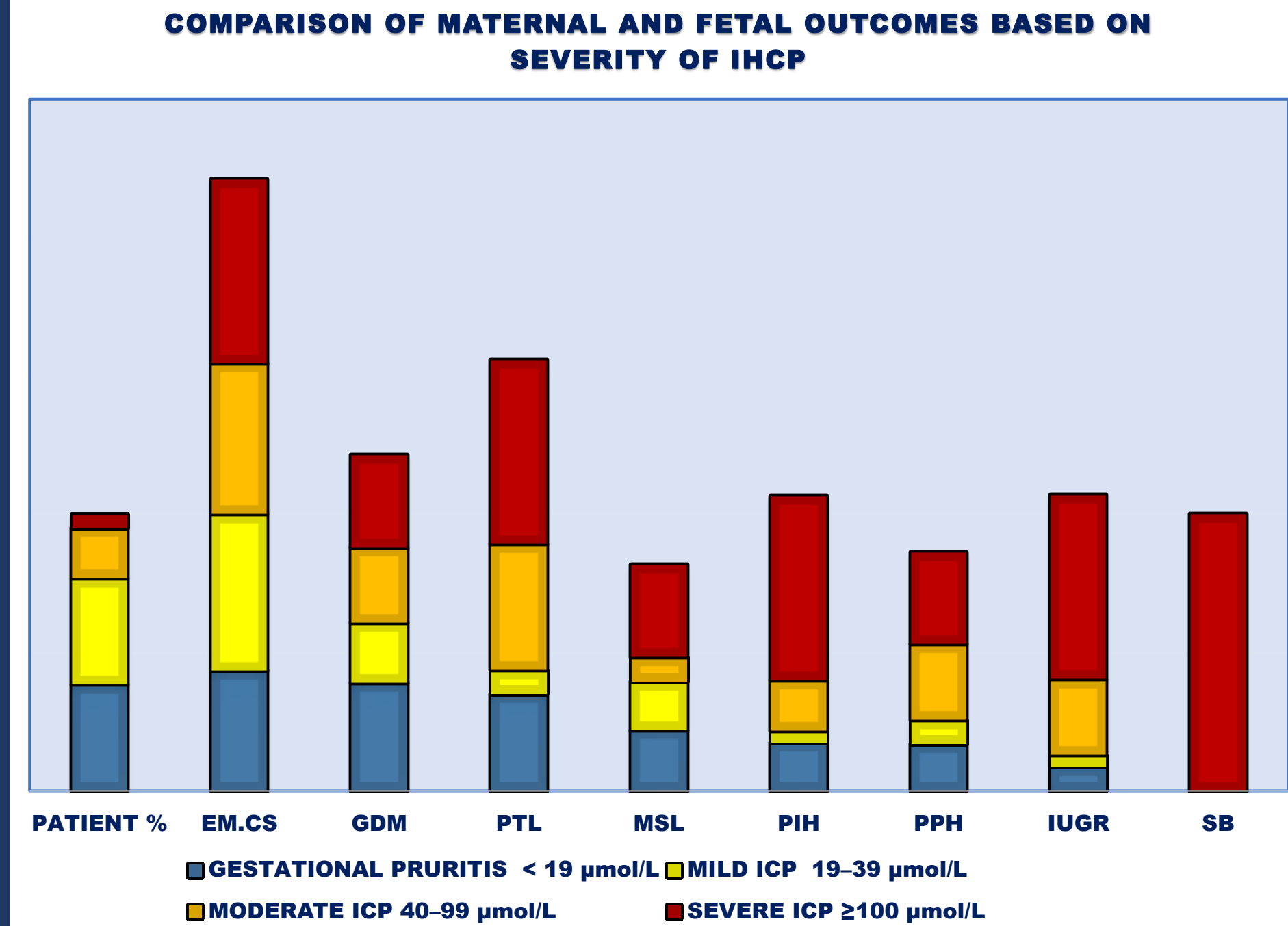
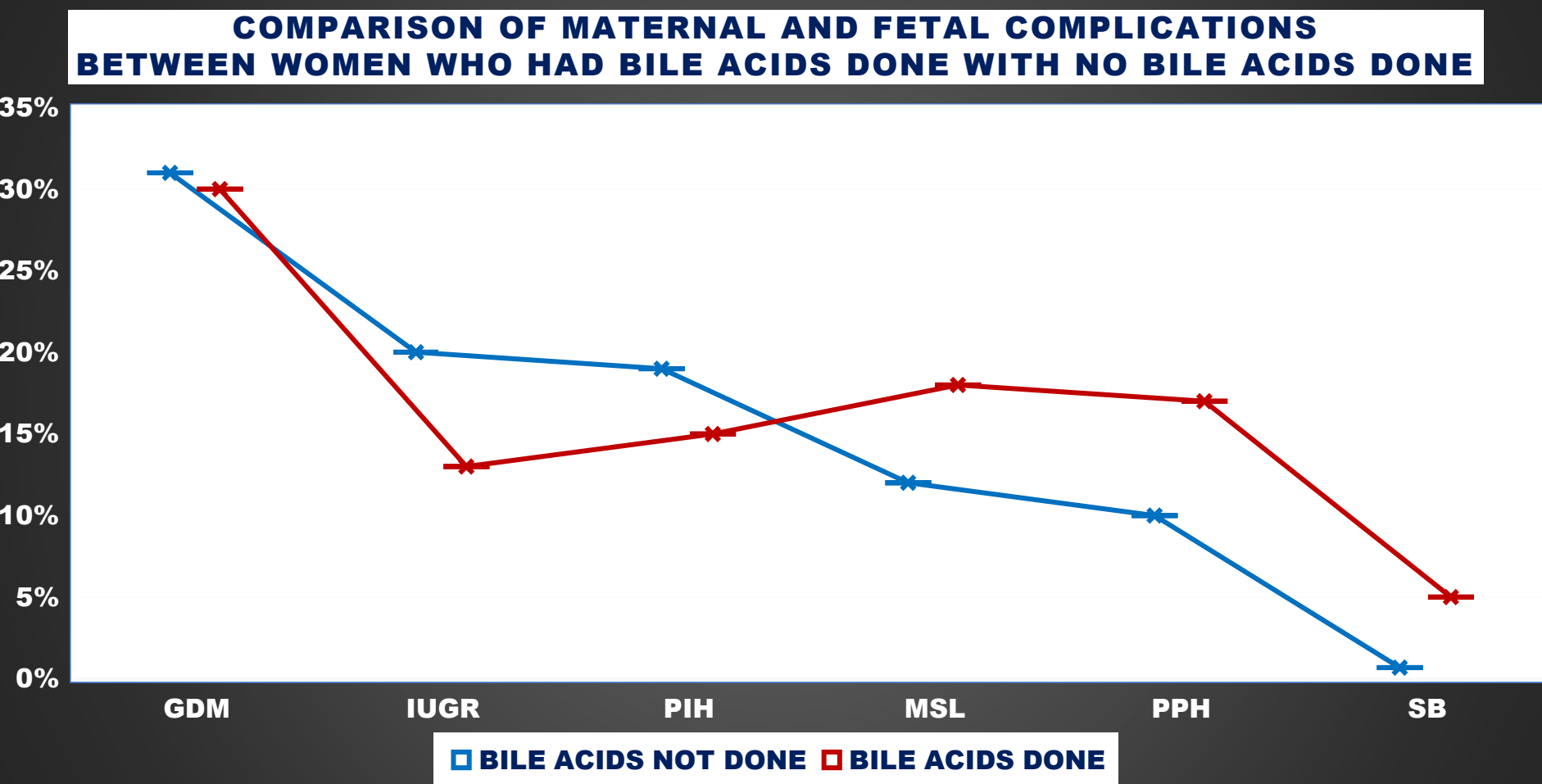
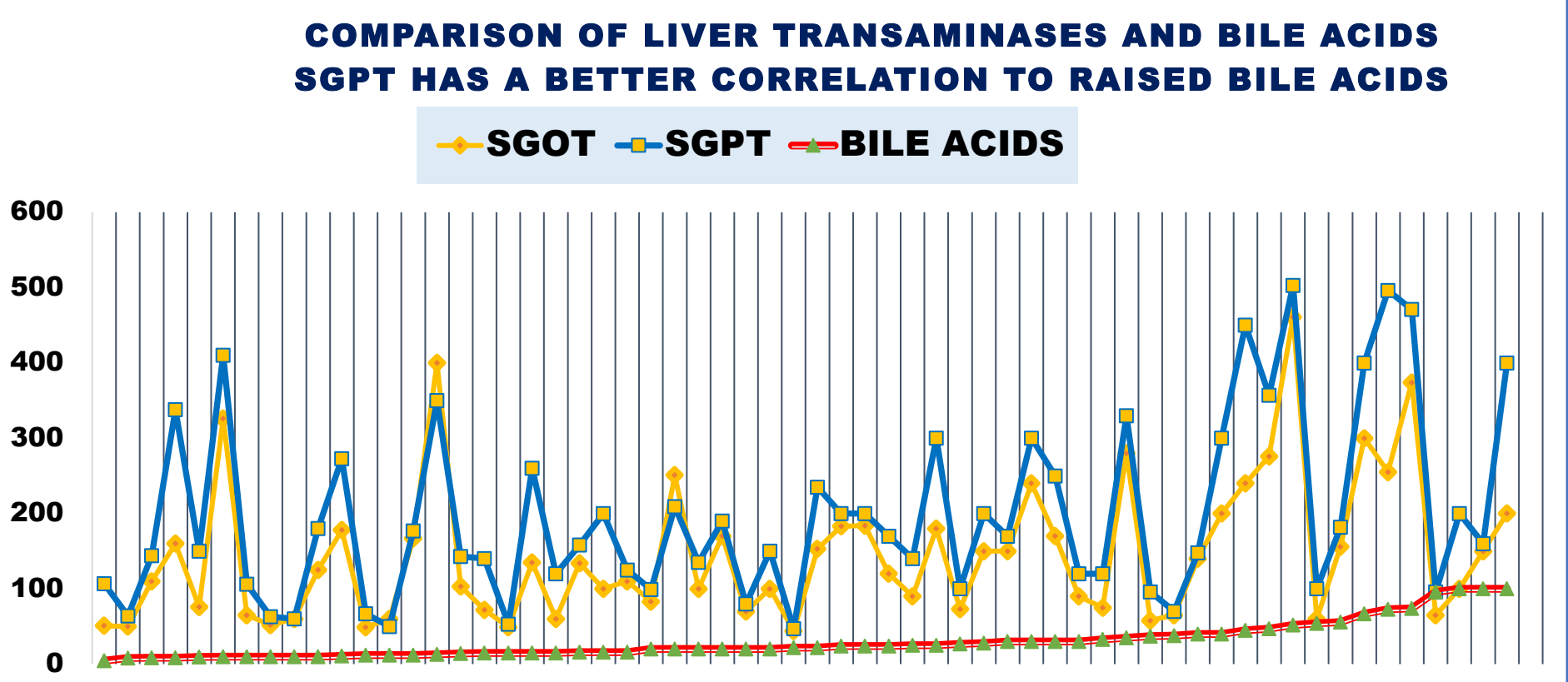
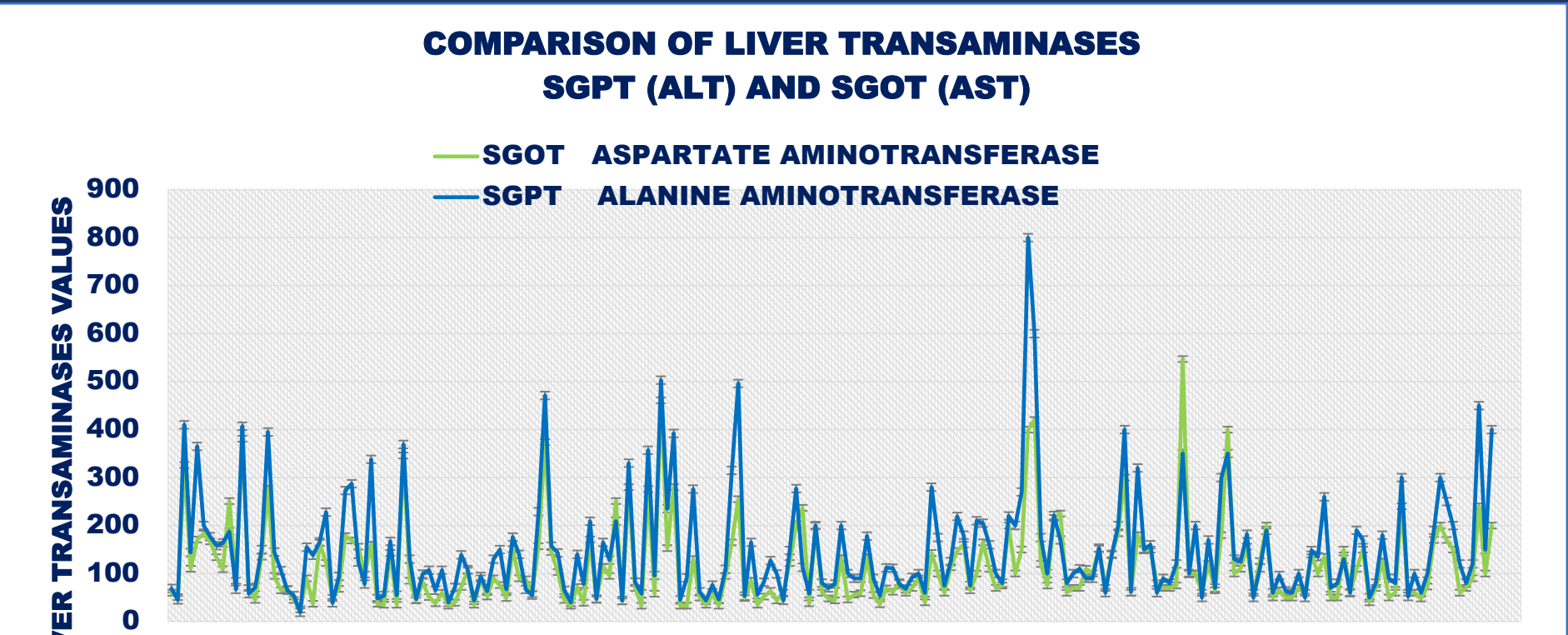
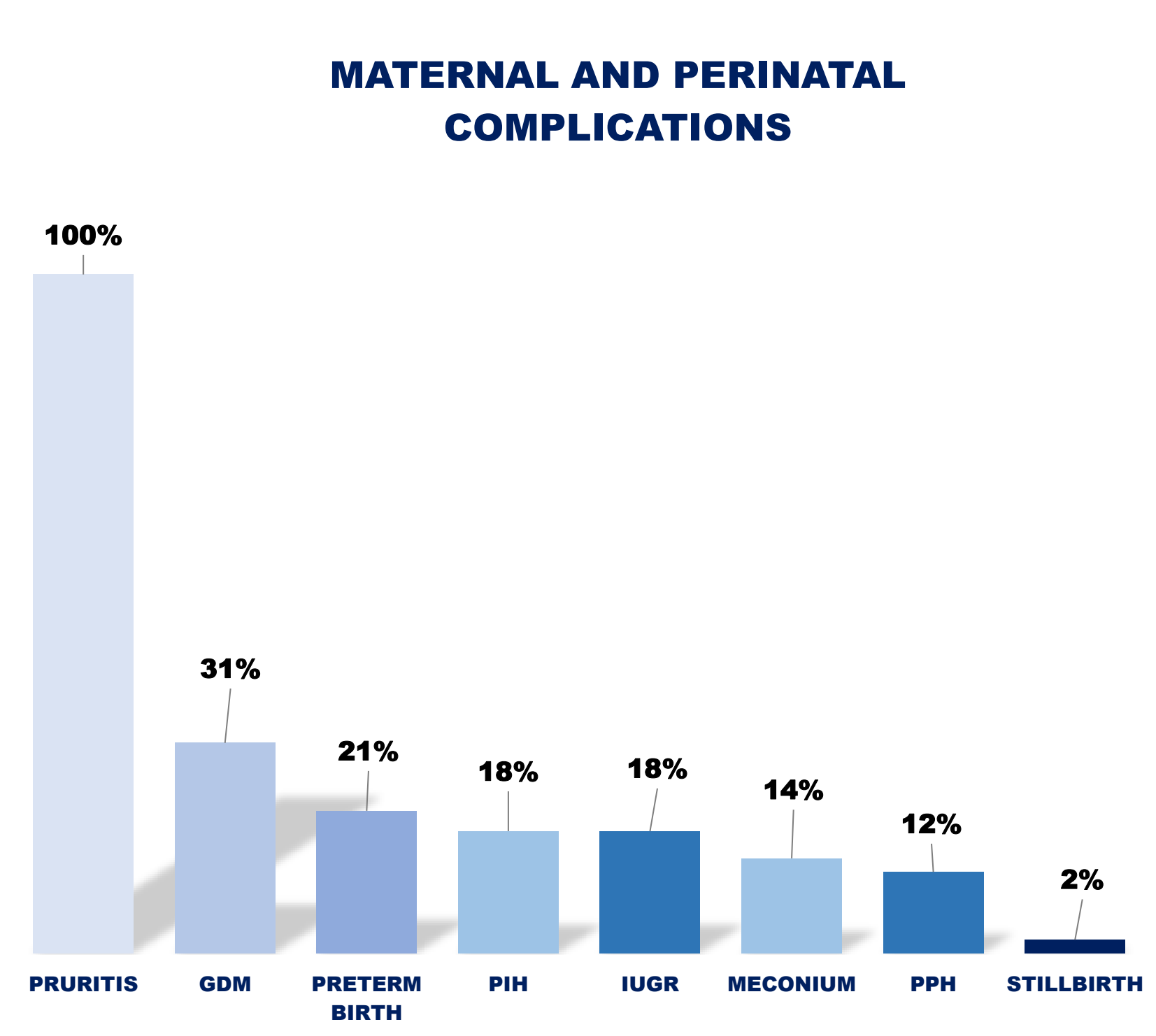
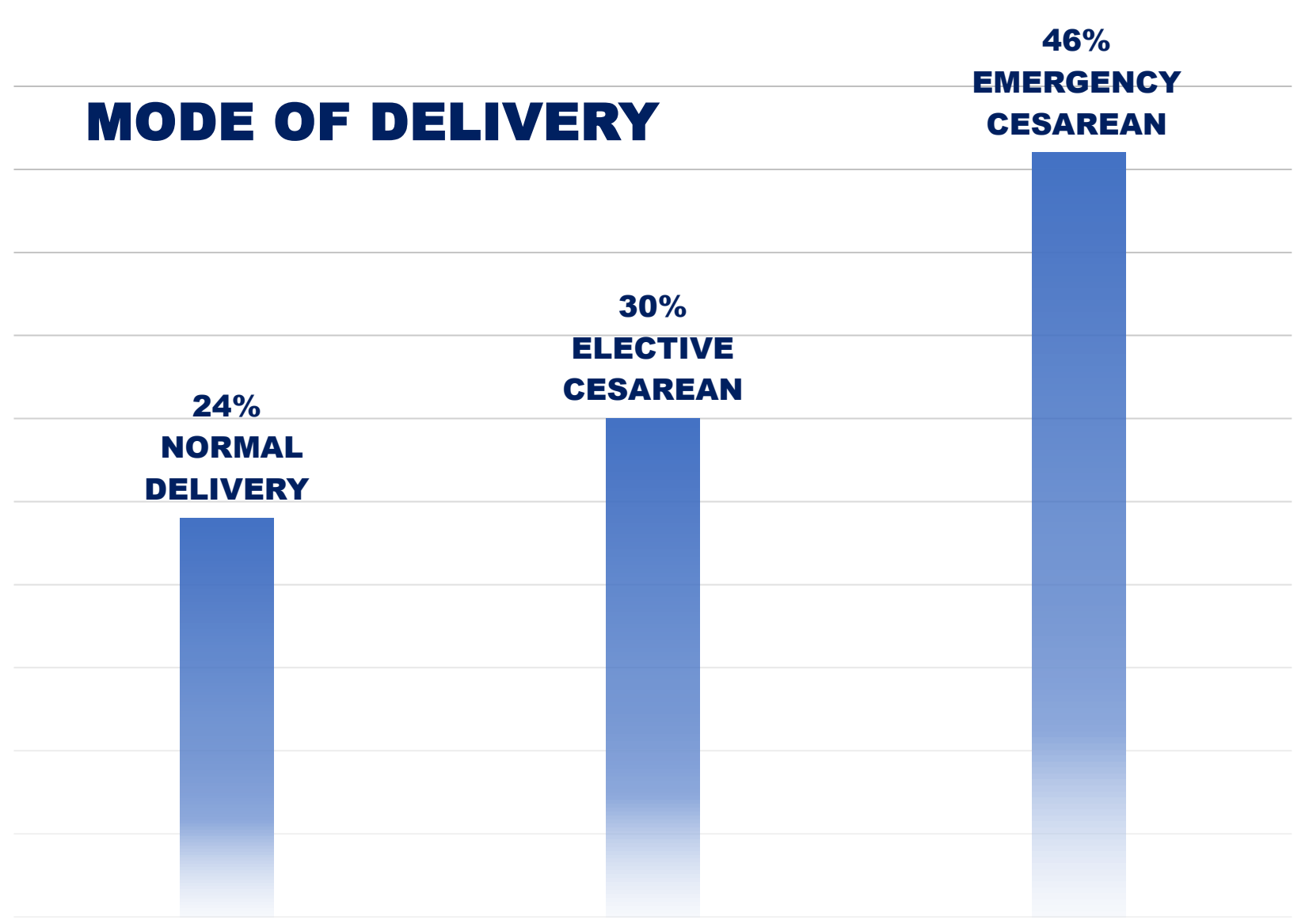
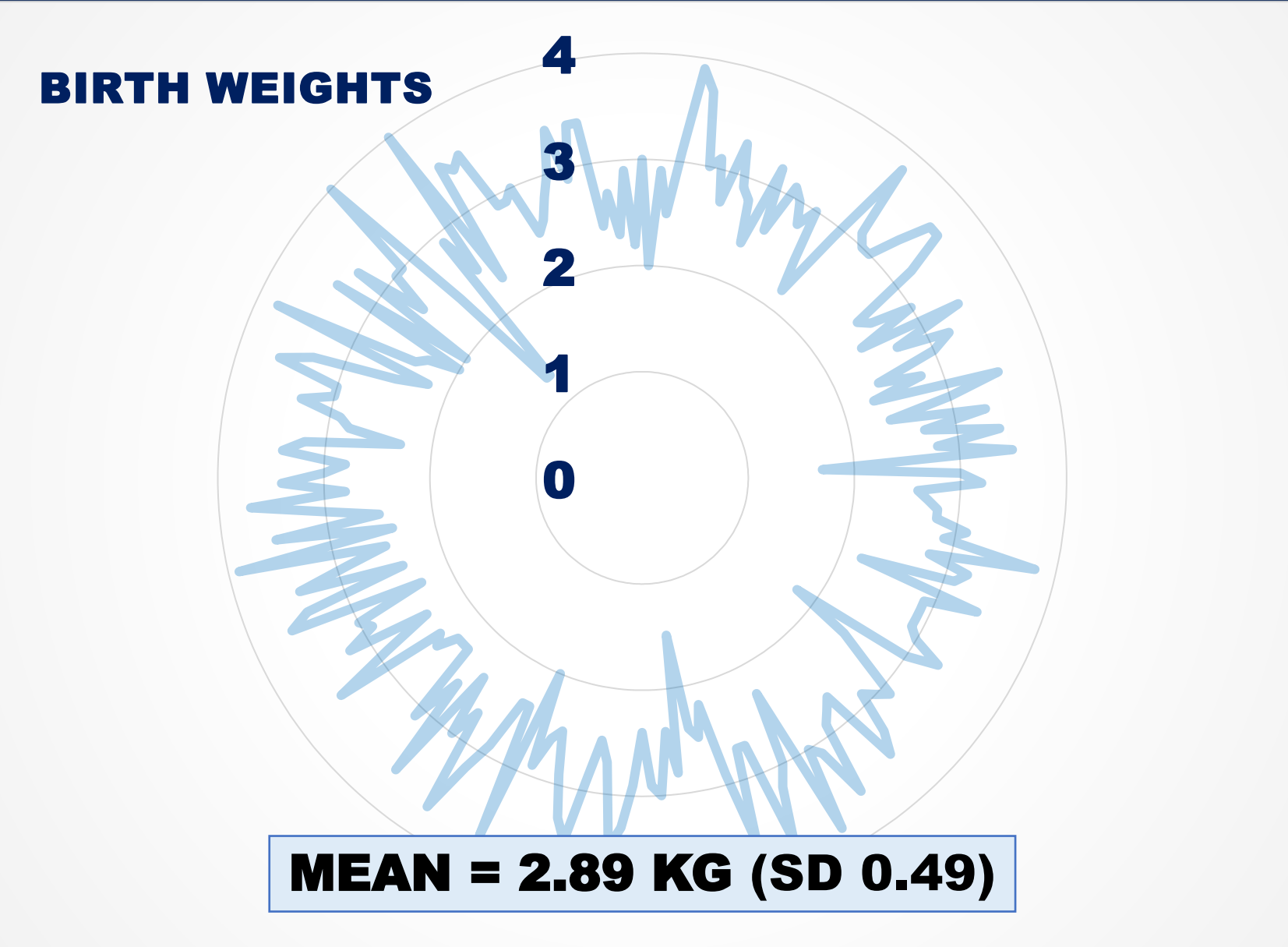
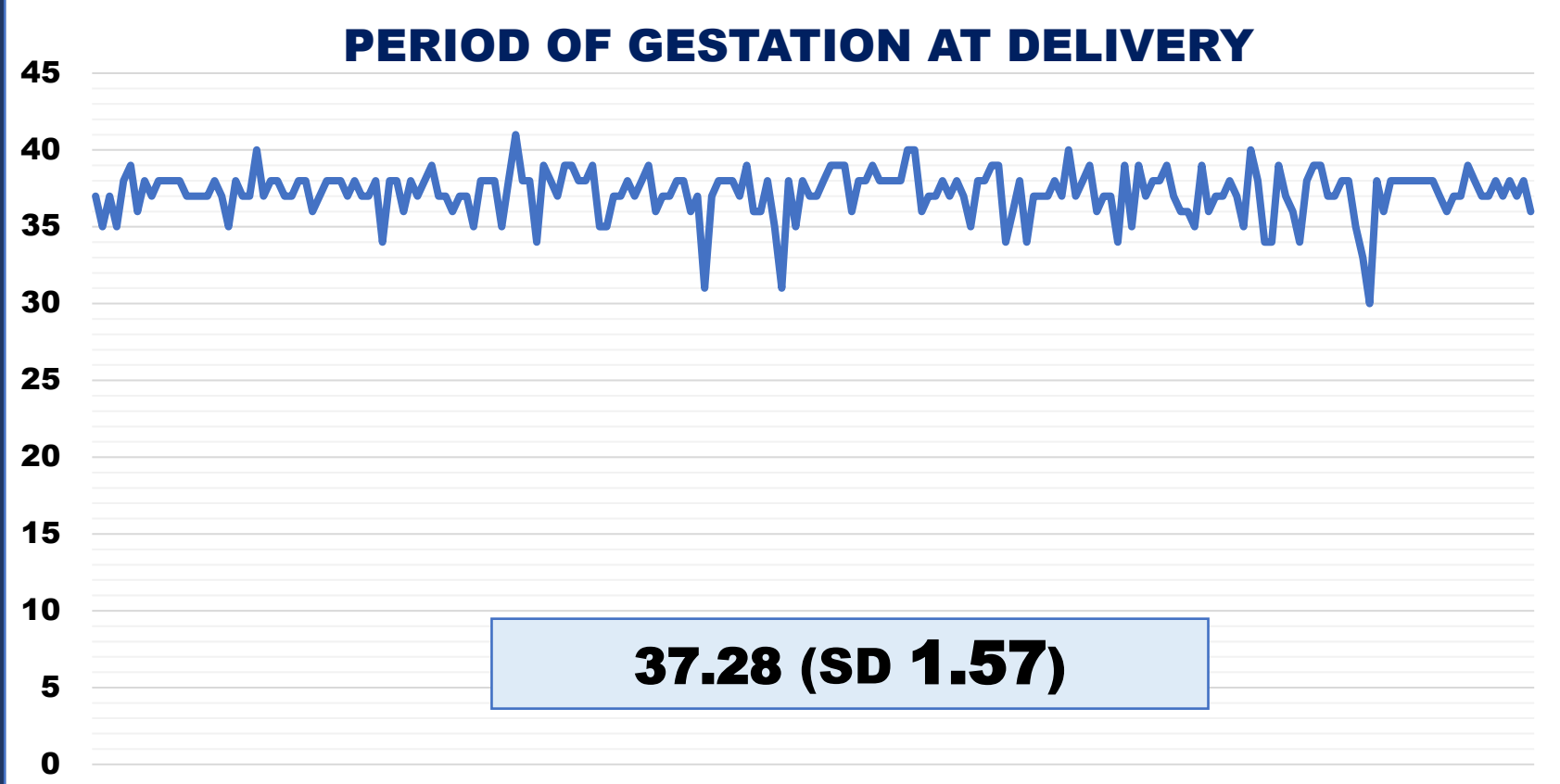
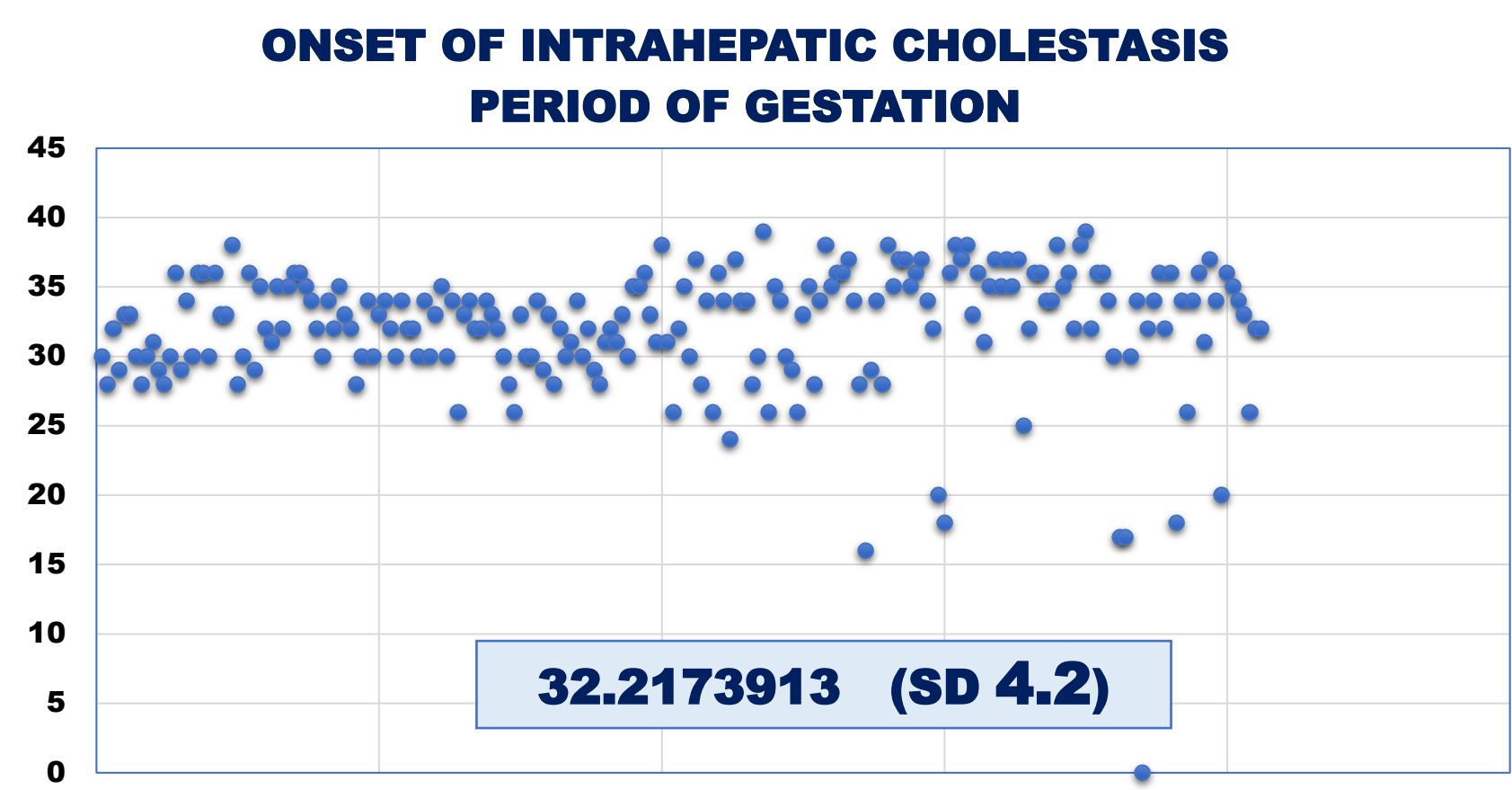
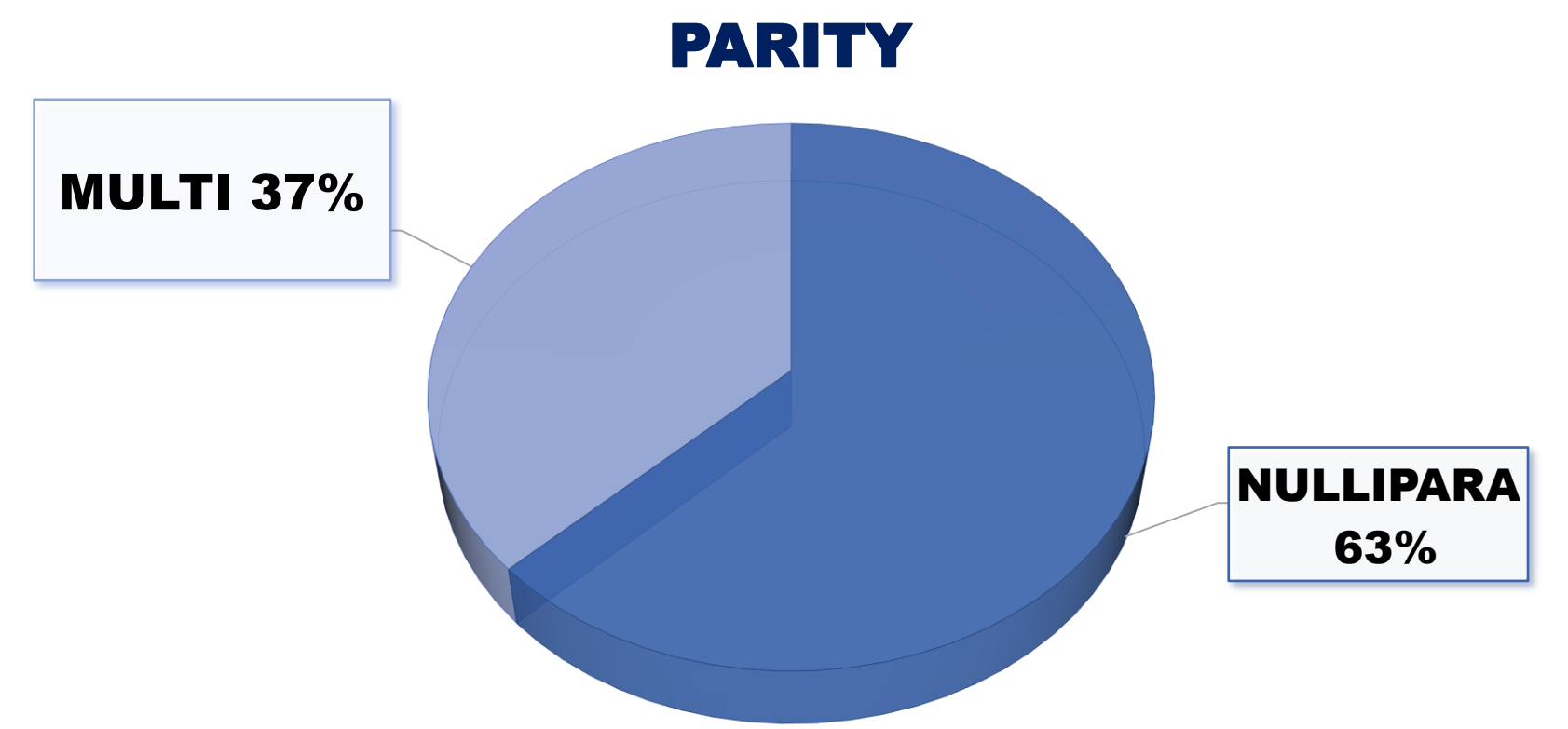
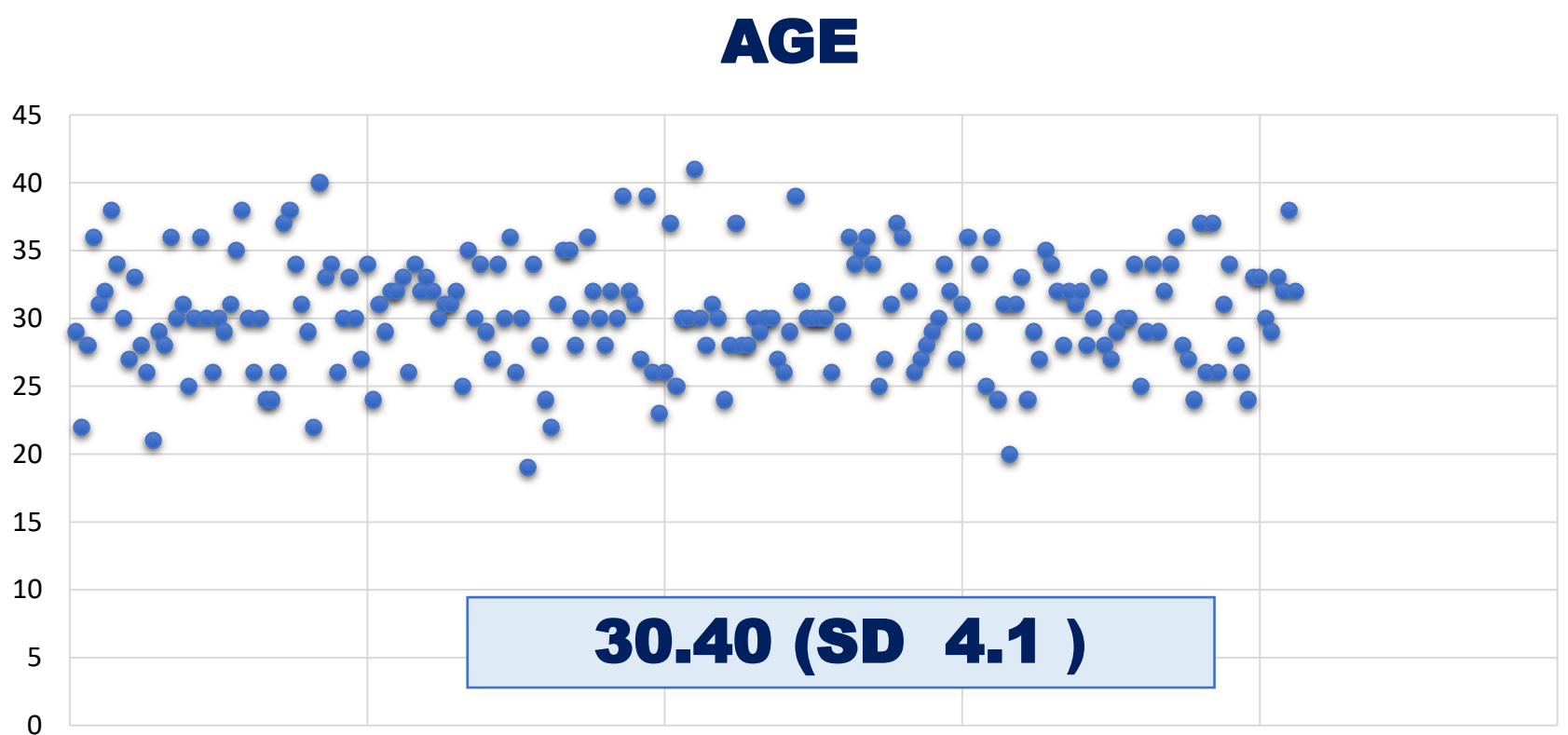
Maternal and perinatal outcomes were studied
Serum Bile acids in non-fasting state
All patients treated with UDCA
Data was analysed on X cel sheet

STUDY DESIGN



RESULTS

PREVALENCE OF ICP
7.08% (206 /2907)



DISCUSSION

CHARACTERSTICS AND OUTCOMES	OUR STUDY	REVIEW OF LITERATURE
INCIDENCE	7.08%	1-5%
GEATATIONAL AGE AT DIAGNOSIS	32 WEEKS	35 WEEKS
STILLBIRTHS	1.94%	3.5% ON MEDICATION
EMERGENCY CESAREAN DELIVERY	46 %	45%
GDM	31 %	16%
PRETERM DELIVERY	21 %	30-40 %
PPH	12 %	0.15 %
PREGNANCY INDUCED HYPERTENSION	18%	31%
IUGR	18%	2%
MECONIUM-STAINED LIQUOR (MSL)	14 %	58%
MILD ICP	38 %	96 %
MODERATE ICP	18 %	17 %
SEVERE ICP	5%	6 %

CONCLUSION

- ☐ Incidence of ICP high in our cohort of women.
- ☐ Gestational age of diagnosis of ICP was early 32 weeks
- ☐ Incidence of gestational Diabetes and Post partum hemorrhage was high.
- ☐ All women were treated with UDCA and it helped in reducing adverse maternal and perinatal outcomes.
- ☐ Compliance to do serum Bile Acids after elevated transaminases to formulate correct diagnosis of ICP is essential.
- ☐ Elevated Serum Bile Acids had significant correlation with elevated SGPT (Alanine transaminase ALT).
- ☐ Incidence of Preterm birth, Pregnancy induced hypertension, meconium and adverse fetal outcomes Intrauterine growth restriction and Still births was high as the severity of ICP increased.
- ☐ All Stillbirths were in the severe ICP group.
- ☐ Recommended to screen all pregnant women in our population for liver function tests at 28 and 32 weeks and bile acids testing if high, as the prevalence of ICP in our population is high.
- ☐ Reaudit after recommendation are put in practice.

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