Adverse outcomes in gravid patients with stage 1 hypertension: Description: New ORLEANS School of Medicine Lacey R. Budd, BS and Tabitha Quebedeaux, MD/PhD ¹Louisiana State University Health Sciences Center, School of Medicine, New Orleans, Louisiana

²Louisiana State University Health Sciences Center, Department of Obstetrics & Gynecology, New Orleans, Louisiana

Introduction

• Stage 1 hypertension (HTN) in birthing persons is associated with adverse pregnancy outcomes

- I. Identify how prominent Stage I HTN is in our patient population
- Identify how often Stage 1 HTN is identified appropriately before 20 weeks gestation
 Determine if low-dose aspirin therapy was recommended for the prevention of preeclampsia
 Determine if prophylactic low-dose aspirin in pregnancies with Stage 1 HTN lowers rates of adverse pregnancy outcomes
- Results
- Pregnancy and postpartum blood pressure trends were reviewed in 733 deliveries.
- 84% of patients had complete records available for review

- These outcomes include severe
 - preeclampsia, small for gestational age (SGA) neonates, and medically indicated preterm birth
- ACOG recommends low-dose aspirin as a prophylactic measure to prevent severe preeclampsia for birthing persons with Chronic HTN (CHTN) in pregnancy
 ACOG has yet to include Stage I HTN as an indication for low-dose aspirin use in pregnancy
- Methods
- A retrospective cohort study was initiated for deliveries at a community hospital from Jan 2017- Dec 2021 • Current and past hypertensive disorders were recorded upon intake into prenatal care and on admission for delivery • All other adverse delivery outcomes were recorded after delivery • Patients > 20 wga were grouped into three categories: normotensive, Stage I HTN, or CHTN • Stage 1 HTN was defined as a blood pressure of 130-139/80-89 • CHTN was defined as blood pressure > 140/90 before 20 wga • Patients were excluded based on incomplete records, multi-fetal gestations,

Results

aspirin

Purpose



- Distributions of blood pressure trends were normal BPs (52%), Stage I HTN (33%) and CHTN (15%)
- Stage I HTN was properly identified in only 5% of pregnancies
- Prophylactic aspirin was used in 22 of 202 patients (11.5%) with Stage I HTN
- Aspirin use in 43% of patients with CHTN

Conclusion

Our patient population is unique due to the high prevalence of the pre existing HTN disorders prior to pregnancy
Maternal cardiovascular disease is a leading cause of maternal morbidity and mortality in Louisiana so additional steps are needed to prevent adverse pregnancy outcomes

Future Considerations

• Will continue to collect data to increase the sample size

- Determine if low-dose aspirin is beneficial in preventing adverse pregnancy outcomes in birthing persons with Stage 1 HTN
- Determine how these outcomes compare to patients with CHTN
- Consider the barriers that may prevent maternal



structural defects in the fetus.

Figure 1: Distribution of blood pressures recorded from participants FIgure 2: Breakdown of participants with HTN disorders that also utilized prophylactic

