

ALASKA NATIVE MEDICAL  
CENTER

OB-GYN DEPT

07/30/20

# POSTPARTUM HTN FOLLOW-UP AT ANMC

# OUTLINE

- Severe Hypertension in Pregnancy (+AIM) Response
- ANMC Postpartum follow-up guidelines
- ANMC ED Postpartum evaluation guidelines
- ANMC Postpartum Follow-Up Data (January & April)
- Successes
- Areas for Improvement
- Comments and Questions

## RESPONSE

*Every case of severe hypertension/preeclampsia*

- Facility-wide standard protocols with checklists and escalation policies for management and treatment of:
  - Severe hypertension
  - Eclampsia, seizure prophylaxis, and magnesium over-dosage
  - Postpartum presentation of severe hypertension/preeclampsia
- Minimum requirements for protocol:
  - Notification of physician or primary care provider if systolic BP  $\geq$  160 or diastolic BP  $\geq$  110 for two measurements within 15 minutes
  - After the second elevated reading, treatment should be initiated ASAP (preferably within 60 minutes of verification)
  - Includes onset and duration of magnesium sulfate therapy
  - Includes escalation measures for those unresponsive to standard treatment
  - Describes manner and verification of follow-up within 7 to 14 days postpartum
  - Describe postpartum patient education for women with preeclampsia
- Support plan for patients, families, and staff for ICU admissions and serious complications of severe hypertension

# Hypertension

# ANMC HTN GUIDELINE POSTPARTUM RECOMMENDATIONS

- Women should be discharged with information about signs and symptoms of pre-eclampsia

## POST-DISCHARGE

In women with preeclampsia and superimposed preeclampsia, BP usually decreases within the first 48hrs after delivery, but will increase again around 3-6 days postpartum and should be monitored closely.

- Monitor for 72hr postpartum, if discharged before this time, she should return for blood pressure check at 72h postpartum
- Blood pressure check again at 7-10days postpartum
- If PP BP is  $> 150 / 100$ , then:
  - Change anti-HTN regimen
  - Change lifestyle
  - Consult OB/GYN
  - If changes made, then re-appt one week
  - Smooth transition to primary care provider

Women with a history of a pregnancy affected by a diagnosis of least preeclampsia are at increased risk of cardiovascular disease later in life. This risk is twice as high as the baseline risk in all women with preeclampsia, and 4-8x higher in women who had recurrent preeclampsia or a delivery before 34 0/7wga due to preeclampsia.

Thus, additional recommendations include:

- Referral to primary care for evaluation and management of arteriosclerotic cardiovascular disease risk factors
- At least yearly assessment of blood pressure, fasting blood glucose, and BMI
- Pre-conception counseling and assessment prior to next pregnancy

# DATA:ANMC HYPERTENSION POSTPARTUM FOLLOW UP

- Timeline: January, April
- Who: Women who delivered at ANMC in January and April who had severely elevated blood pressures while inpatient
- Evaluated:
  - Presence of CHTN
  - Received medication for severely elevated blood pressures
  - Received scheduled antihypertensive medication
  - Discharged on antihypertensive medication
  - Discharge by MD or CNM
  - Type of education received at discharge
  - Method of scheduled follow up
  - If postpartum visits (day 3 and day 7-10) were scheduled
  - If postpartum visits were attended
  - If CHTN present, was a referral back to PCP made

# JANUARY DATA

## ■ Characteristics

- 13 women with severely elevated BP
- 6/13 have CHTN
- 11/13 received antihypertensive medication to treat severe range BP (labetalol, IR nifedipine, and/or hydralazine)
- 10/13 were placed on schedule antihypertensive medications
- 7/13 were discharged on antihypertensive medications
- 11/13 were discharged by a CNM

## ■ Education

- 5/13 received education from discharging provider
- 3/13 received “official” education at time of discharge

## ■ Referral

- 7/13 had official referral placed for PP f/u
- 4/13 had communication to Case Manager or other entity re: need for PP f/u
- 7/13 were seen at 72 hr (3/7 remained inpatient)
- 2/13 had known f/u between PPD 7-10
- 1/6 w/CHTN referred to PCP

# APRIL DATA

## ■ Characteristics

- 15 women with severely elevated BP
- 8/15 have CHTN
- 10/15 received antihypertensive medication to treat severe range BP (labetalol, IR nifedipine, and/or hydralazine)
- 7/15 were placed on schedule antihypertensive medications
- 7/15 were discharged on antihypertensive medications
- 11/15 were discharged by a CNM

## ■ Education

- 8/15 received education from discharging provider
- 7/15 received “official” education at time of discharge

## ■ Referral

- 8/15 had official referral placed for PP f/u
- 7/15 had communication to Case Manager or other entity re: need for PP f/u
- 9/15 were seen at 72 hr (2/9 remained inpatient)
- 9/15 had known f/u between PPD 7-10
- 5/8 w/CHTN referred to PCP

# EMERGENCY DEPARTMENT CASES

## January – PP ED Visits

- PP ED Visits = 3
  - PPD#6 RLQ pain, vaginal bleeding; mild range BP
  - PPD#10 Underlying pulmonary problem exacerbation, readmitted to medicine; normotensive
  - PPD#4 Heavy vaginal bleeding; mild range BP

## April – PP ED Visits

- PP ED Visits = 2
  - PPD#4 w/symptomatic severe HTN, readmitted
  - PPD#7 w/wound drainage, severe HTN, med adjustment and clinic f/u
- Unscheduled triage visits = 1
  - PPD#3 Elevated BP at home, readmitted to obs



# WHAT IS WORKING

- About ½ of women have BP eval at 72 hours
- Women are consistently referred for f/u appointment
- Appointments are scheduled in ANC
- When given BP cuff, women use it and return for care
- Higher attendance for 72hr and 7-10d w/triage and/or phone visit
- Nutaqsiivik Nurse-Family Partnership

# AREAS FOR IMPROVEMENT

- Increase percentage of women who are seen at 72hr and within 7-10day
- Increase education at discharge
- Improve communication and partnership with field sites for scheduling and confirmation
- Extended f/u when on antihypertensive medication

# IDEAS FOR IMPROVEMENT

- PP rounding and f/u appointments with MD/DO when on scheduled medications
- Expand use of telephone and triage follow-up
- Expand home monitoring
- Standardize PP appointment referral process
- Discharge orderset
- Referral at time of d/c to PCP for CHTN



QUESTIONS?  
COMMENTS?



# THANK YOU

