North East and North Cumbria Regional Guideline for Antenatal Aspirin Prophylaxis

Version	1
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1. Introduction

- Aspirin reduces the risk of pregnancy complications related to placental dysfunction, particularly preeclampsia. There is evidence that Aspirin can reduced the risk of early onset PET by 62 % (< 32 weeks) but no benefit at term preeclampsia (1,6, 9)
- Aspirin prophylaxis is recommended in women at high risk of preeclampsia and should be considered for women with more than one of several moderate risk factors for preeclampsia (2)

High risk of PET	>1 moderate risk factor
Hypertensive disease during a previous pregnancy	Nulliparity
Autoimmune disease (such as systemic lupus erythematosus or antiphospholipid syndrome)	Age >40
Chronic kidney disease	Pregnancy interval > 10 years
Chronic Hypertension	BMI ≥ 35 kg/m2 at first visit
Diabetes Type 1 and 2	Family history of preeclampsia in a first degree relative
Placental histology confirming placental dysfunction in a previous pregnancy (maternal vascular malperfusion-MVM) (5, 11) If no placental pathology available previous early onset growth restriction (< 32 weeks) requiring iatrogenic preterm delivery ≤ 37 weeks	Multiple pregnancy

- Low-dose Aspirin prophylaxis is not recommended solely for the indication of (4,8):
  - Prior unexplained stillbirth, in the absence of risk factors for preeclampsia
  - Low PAPP-A
  - For fetal growth restriction in absence of preeclampsia

- Recommended dose of Aspirin:
  - 150 mg daily at night from 12 weeks, to be commenced by 16 weeks (6,7)
  - To stop by 36 weeks (4)
  - For twins to stop after 32 weeks (high risk of preterm birth)

- Aspirin prophylaxis is associated with the risk of hemorrhagic complications (3):
  - Intrapartum bleeding (aspirin 2.9% vs 1.5% nonusers, odds ratio 1.63)
  - PPH (Aspirin 10.2% vs 7.8% non-users, odds ratio 1.23)
  - Postpartum hematoma (Aspirin 0.4% vs 0.1% nonusers, odds ratio, 2.21)

- Neonatal intracranial haemorrhage (Aspirin 0.07% vs 0.01% nonaspirin), odds ratio 9.66)
- After stratifying by mode of birth, a higher incidence of bleeding among aspirin users was present for those who had a vaginal birth but not those who had a caesarean delivery.

- Contraindications: active peptic ulcer, bleeding disorders, children < 16 years (risk of Reye's syndrome), haemophilia, allergy

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