Supplementary Material

Example cases for antenatal corticosteroid use in the late preterm period

1. SS is a 24-year-old female G1P0 at 354/7 weeks who presents to labor and delivery (L&D) with preterm premature rupture of membranes diagnosed by vaginal pooling, positive nitrazine test, and positive fern test. The cervix is closed. Bedside abdominal ultrasound reveals a singleton fetus in a cephalic presentation. A primary cesarean is recommended. Do you administer antenatal late preterm corticosteroids in this clinical situation?

Answer: No. The delivery is expected in less than 12 hours; therefore, this patient is not eligible for late preterm steroids.

2. JD is a 33-year-old female G3P1 at 343/7 weeks who presents to L&D with preterm premature rupture of membranes diagnosed by vaginal pooling, positive nitrazine test, and positive fern test. Bedside abdominal ultrasound reveals a singleton fetus in a cephalic presentation. The cervix is 2 cm dilated. Fetal heart rate monitoring is reassuring and tocometry reveals no uterine contractions. Do you administer antenatal late preterm corticosteroids in this clinical situation?

Answer: Yes. We would proceed with induction of labor. Due to a cervical dilation of 2 cm and no uterine contractions, we anticipate enough time to delivery (>12 hours) for some benefit of late preterm steroids.

3. XO is a 19-year-old female G2P0 at 362/7 weeks who presents to L&D with preterm premature rupture of membranes diagnosed by vaginal pooling, positive nitrazine test, and positive fern test. Bedside abdominal ultrasound reveals a singleton fetus in a cephalic presentation. The cervix is 2 cm dilated. Fetal heart rate monitoring is reassuring and tocometry reveals uterine contractions every 5 minutes. It is determined that withholding Pitocin for at least 12 hours is possible. Do you administer antenatal late preterm corticosteroids in this clinical situation?

Answer: Yes. In the setting of preterm premature rupture of membranes, withholding induction of labor for at least 12 hours should allow enough time for some benefit of late preterm steroids.

4. MS is a 35-year-old female G4P1203 at 341/7 weeks who presents to L&D with elevated blood pressures. In L&D triage, her blood pressures range from 140–152/86–98 mm Hg; otherwise, vital signs are normal. While in triage, she has recorded blood pressures of ≥140 mm Hg systolic on two occasions at least 4 hours apart. Physical examination is unremarkable. Fetal heart rate monitoring is reassuring and tocometry reveals no uterine contractions. Laboratory results are as follows: hemoglobin 13.7 g/dL, hematocrit 36.5%, platelet count 155,000, AST 45 IU/L, ALT 50 IU/L, serum creatinine 0.5 mg/dL, and urine protein/creatinine ratio 0.6. The diagnosis of preeclampsia without severe features is made. Do you administer antenatal late preterm corticosteroids in this clinical situation?

Answer: No. We would start the induction of labor immediately; therefore, she is not eligible for late preterm steroids. Delivery, when expected within 12 hours, should not be delayed for administration of late preterm steroids.

5. a. SM is a 16-year-old female G1 at 346/7 weeks who presents to L&D with elevated blood pressures. She denies headache, chest pain, shortness of breath, vision changes, and abdominal pain. She has an unremarkable past medical history. In L&D triage, her blood pressures range from 130–148/80–90 mm Hg; otherwise, vital signs are normal. While in triage, she has recorded blood pressures of ≥140 mm Hg systolic on two occasions at least 4 hours apart. Physical examination is unremarkable. Fetal heart rate monitoring is reassuring and tocometry reveals no uterine contractions. Laboratory results are as follows: hemoglobin 12.7 g/dL, hematocrit 36.5%, platelet count 155,000, AST 45 IU/L, ALT 50 IU/L, serum creatinine 0.5 mg/dL, and urine protein/creatinine ratio 0.3. The diagnosis of preeclampsia without severe features is made. Plan for timing of delivery is 37 weeks’ gestation unless clinically indicated earlier. Do you administer antenatal late preterm corticosteroids in this clinical situation?

Answer: Yes, due to her intermittent headache and borderline laboratory values, there is concern for developing preeclampsia with severe features, and therefore is at high likelihood of delivery is within 7 days and less than 37 weeks. This also is at the discretion of the provider. If she is not at high likelihood of delivery within 7 days and delivery is not planned until 370/7 weeks’ gestation, she would be ineligible for late preterm steroids.
6. MD is a 27-year-old female G3P2 at 35\(\frac{5}{7}\) weeks who presents to L&D with contractions. Bedside abdominal ultrasound reveals a singleton fetus in a cephalic presentation. Fetal membranes are intact. The cervix is 4 cm dilated, 80% effaced. Fetal heart rate monitoring is reassuring and tocometry reveals uterine contractions every 4 minutes. Do you administer antenatal late preterm corticosteroids in this clinical situation? 
Answer: Yes. She is eligible for late preterm steroids. Unlike administration of steroids before 34 weeks' gestation, tocolysis is not to be used in the late preterm population as it was not used in the ALPS trial.

7. ZZ is a 29-year-old female G3P1 at 35\(\frac{2}{7}\) weeks who presents to L&D with contractions. Bedside abdominal ultrasound reveals a singleton fetus in a cephalic presentation. Fetal membranes are intact. The cervix is 2 cm dilated, 50% effaced. Fetal heart rate monitoring is reassuring and tocometry reveals uterine contractions every 5 minutes. Do you administer antenatal late preterm corticosteroids in this clinical situation? 
Answer: No. She is not eligible because the cervix is <3 cm dilated and <75% effaced.