Management of Stillbirth

Background:
Stillbirth is typically defined as a fetal death that occurs at 20 weeks or greater of gestation, or a weight greater than or equal to 350 grams. It occurs in 6 per 1,000 births.

Risk Factors:
- Non-Hispanic black race
- Nulliparity
- Age 35 years and older
- Obesity
- Tobacco use
- Drug and alcohol use
- Multiple gestations
- Medical conditions, including:
  - Hypertension
  - Diabetes
  - Antiphospholipid syndrome (APS)
  - Lupus
  - Renal disease
  - Severe cardiac disease
  - Sickle cell disease
  - Thyroid disease
  - Cholestasis of pregnancy
- Uteroplacental insufficiency / Fetal growth restriction
- Placental abruption
- Infections, including:
  - Parvovirus B19
  - Syphilis
  - Cytomegalovirus (CMV)
  - Listeria
  - Malaria
- Congenital anomalies / Aneuploidy / Genetic syndromes
- Past obstetric history (e.g., growth restriction, preeclampsia)

Management:

1. Obtain pregnant patient’s history
   - Medical conditions
   - Medications
   - Potential infectious exposures
   - Prior obstetric history
   - Family history (three-generation pedigree, if possible)
2. Perform laboratory testing:
   - Type & screen
   - CBC w/ differential
   - Syphilis (RPR)
   - Kleihauer-Betke (KB)
   - Lupus anticoagulant
   - Anticardiolipin antibody (IgG and IgM)
   - Beta-2-glycoprotein antibody (IgG and IgM)

Other possible laboratory testing, in selected cases:
   - TSH and/or hemoglobin A1C, if suggested by history or fetal size (A1C)
   - Infectious serologies (IgG and IgM), if suspected from ultrasound
   - Inherited thrombophilias ONLY if personal or family history of thrombosis

3. Discuss plan for delivery
   - Most patients will desire prompt delivery, however timing is not critical
   - If early gestational age, can offer dilation and evacuation (D&E), depending on available skilled providers
     - Not able to perform intact fetal examination / autopsy
   - If later gestational age, discuss induction of labor:
     - **Up to 28 weeks 0 days:**
       - Vaginal misoprostol 400 mcg every 4 hours
     - **Greater than 28 weeks:**
       - Vaginal misoprostol 50 mcg every 4 hours
   - Provider discretion should be used for patients with a previous C-section
   - Anesthesia consult on admission

*In general, cesarean delivery for fetal demise should be reserved for unusual circumstances because it is associated with potential parental morbidity without any fetal benefit. In patients with an increased risk of uterine rupture (history of classical hysterotomy or transfundal surgery), repeat cesarean delivery is a reasonable option.*

4. Request appropriate consultations on admission:
   - Anesthesia consult
   - Spiritual Care consult (if desired)
   - Social Services (if desired)

5. Examine fetus at delivery, including:
   - Fetal weight
   - Dysmorphic features (include description in delivery note)
   - May opt to take photographs of abnormalities, if Genetics is not available
6. Send placenta to Pathology to examine placenta, cord, and membranes
   - If concern for infection, obtain placental culture

Offer fetal autopsy, which requires separate consent

   - May be complete or limited autopsy, depending on parental preferences
   - If autopsy is declined, offer external examination and measurements only
   - If autopsy is declined, offer fetal whole body X-ray

7. Offer genetic testing
   - Microarray preferred, as more likely to yield result
   - Obtain sample:
     Placental block (1 x 1 cm) taken from below cord insertion site **OR**
     Umbilical cord segment (1.5 cm) closest to placenta
   - Place sample in sterile tissue culture medium

8. Offer examination/consult by Genetics, **ONLY IF** known fetal anomalies
    and/or suspected fetal aneuploidy

9. Discuss disposition of fetus, which is either:
   - Burial / cremation by funeral director of choice
   - Disposal as an anonymous specimen by the hospital
   - Release remains to designated person, which may require transit permit

10. Offer emotional support services, including:
    - Spiritual Care
    - Local support groups

11. Provide patient counseling, including:
    - Etiology of stillbirth is unknown in ~50% of cases, despite full workup
    - Risk of recurrence is LOW for unexplained stillbirth (< 1%)
    - Higher risk of fetal loss for patients with risk factors (e.g., diabetes)
    - Consider Maternal-Fetal Medicine consultation for future pregnancy
    - Plan for increased fetal surveillance in 3rd trimester for future pregnancy

Reference: