# REI Case 4 – Mentor Answer Key

Case Questions, ***Part A*:**

1. What is your diagnosis and what is the definition of your diagnosis? What is the prognosis for a live born infant?

**Recurrent Pregnancy Loss**

**Recurrent Pregnancy Loss is classically defined as 3 or more pregnancy losses before 20 weeks of gestation, excluding ectopic, molar and biochemical pregnancies. The American Society of Reproductive Medicine defines recurrent pregnancy loss as 2 or more of these losses documented by ultrasonography or pathology. While ASRM recommends assessment after each loss, they recommend full evaluation after 3 losses.**

**The prognosis for a live born infant is about 75%, regardless of the outcome of the evaluation.**

2. What is your differential diagnosis for the etiology (and the likelihood of each)?

**The etiology of recurrent pregnancy loss is unexplained in approximately 50% of cases. Recurrent genetic causes account for recurrent pregnancy loss in about 3-5% of cases. Congenital and acquired uterine malformations account for about 20% of cases. Antiphospholipid antibody syndrome is estimated to be the etiology in 10-15% of cases. Endocrine abnormalities account for the remainder of the known etiologies of recurrent pregnancy loss.**

3. What additional history is warranted?

**It is important to know whether these pregnancies were clinically recognized by ultrasonography or pathology. It is also important to note whether fetal heart tones were seen. Consanguinity in the family is important in the evaluation of recurrent pregnancy loss. Any exposure to environmental toxins during early pregnancy should be explored.**

4. What tests do you order?

**The most useful tests are the karyotype, assessment of the uterine cavity, measurement of anticardiolipin and antiphospholipid antibodies and measurement of TSH to exclude the possibility of hypothyroidism.**

**Less useful tests have included tests of ovarian reserve, testing for occult medical disorders (ie. Hypercoagulability), luteal progesterone levels, screening for diabetes and several others.**

Case Questions, ***Part B*:**

1. What is the difference between a bicornuate and a septate uterus and how do you differentiate them?

**A septate uterus has a normal fundal contour but two endometrial cavities. A bicornuate uterus has two distinct uterine horns (an indented fundus) and two uterine cavities. They can be distinguished by saline sonohysterography, pelvic magnetic resonance imaging or surgically via a laparoscopy combined with a hysteroscopy.**

2. What do you recommend for the patient at this point?

**Hysteroscopic removal of the uterine septum. This is often done with either ultrasound or laparoscopic guidance.**

3. What does the pooled progesterone result mean? Explain luteal phase deficiency/diagnosis and treatment.

**The diagnosis of luteal phase insufficiency is controversial. It had previously been evaluated by luteal endometrial biopsy to determine whether the endometrium was 'in-phase' or 'out of phase'. Currently, this potential abnormality is diagnosed by pooled progesterone levels drawn in the luteal phase. A normal result is greater than 10 ng/ml. If luteal phase deficiency is diagnosed, it is treated either with supplemental luteal progesterone or clomiphene citrate therapy.**

Case Questions, ***Part C***:

1. What do you do now? How would you manage her next attempt at pregnancy?

**The management of a spontaneous abortion in these patients is unaltered from other situations of spontaneous abortion: expectant, medical or surgical management. Monitoring of early pregnancy by serial hCG levels and ultrasonography in patients with recurrent pregnancy loss has been shown by preliminary data to lead to a decreased incidence of recurrent loss and seems to offer some psychological benefit to the patient.**

2. What if the antiphospholipid antibody testing was abnormal? How would you manage her differently? What risks does she have during pregnancy?

**The diagnosis of antiphopholipid antibody syndrome should be made by testing of the patient twice remote from pregnancy. Thus, a positive test initially should be repeated. The management of antiphopholipid antibody syndrome in pregnancy is controversial and will often include aspirin therapy and/or anti-coagulation. These management decisions are often made in conjunction with Maternal Fetal Medicine.**

**Aside from recurrent pregnancy loss, pregnant women with antiphospholipid antibody syndrome have increased risks of thrombosis, pre-eclampsia and intrauterine fetal growth restriction.**