A 31-Year-Old Woman with Consecutive Pregnancy Losses

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CASE DESCRIPTION

A 31-year-old Chinese woman with bilateral upper extremity swelling presented to the emergency department at the 20th week of gestation. According to the patient, "normal fetal movement" had stopped 3 days before admission. No abdominal pain or obvious vaginal bleeding was noted. Her body temperature was 36.5 °C and blood pressure was 110/70 mmHg with a heart rate of 80 beats/min. However, there was no fetal heart rate or movement that could be detected by ultrasonography examination, suggesting spontaneous abortion. Although there was no significant family history, the patient had 1 stillbirth 3 years ago at 27 weeks of gestation, accompanied by eclampsia before her labor induction.

Because her fetus showed no signs of life with ultrasonography examination, the patient agreed to have ethacridine (Rivanol)-induced labor on day 3 of her hospitalization. On the day of her induction, her blood pressure went up to 158/82 mmHg with proteinuria (urine chemistry: protein +4) and low platelet count (90 X 10^9/L, normal range 100–300X10^9/L), consistent with a diagnosis of preeclampsia. Magnesium sulfate was administrated during and after the delivery for seizure prophylaxis. After delivery, her blood pressure decreased to 133/81 mmHg and other preeclampsia symptoms resolved in the next few days before discharge.

According to the patient's medical record, she had unremarkable endocrine status and negative screening results for infections [toxoplasmosis, rubella cytomegalovirus, herpes simplex, HIV, syphilis, HBV (hepatitis B virus), and HCV (hepatitis C virus)]. The patient had a triple test (α-fetoprotein, human chorionic gonadotropin, and estriol) in her second trimester that showed low risk for Down syndrome. The fetus was sent for autopsy and developmental anomalies were excluded. Relevant laboratory values are shown in Table 1.

QUESTIONS TO CONSIDER
• How is recurrent pregnancy loss (RPL)[4] defined and what is its frequency?
• List the most frequent causes of RPL.
• What diagnosis is suggested by the laboratory results?

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Table 1. APS testing and autoimmune antibody testing results.

Test	Patient result	Reference interval
Lupus anticoagulant test		
DRVVT, seconds	65.5	33–44
DRVVT mix, seconds	63.2	33–44
DRVVT confirmation, screen/ confirmation	1.70	0.00–1.20
Prothrombin time, seconds	12.6	10.0–14.0
APTT, seconds	33.5	22.8–35.0
Thrombin time, seconds	15.9	14.0–21.0
APS antibody test		
Anticardiolipin antibody	Negative	Negative
Anti-β2 glycoprotein I antibody	Negative	Negative
Autoimmune antibody panel		
Antinuclear antibody (ANA)	Positive	Negative
Anti-dsDNA	Positive	Negative
Antihistones	Positive	Negative
Anti-Sm	Positive	Negative
Anti-snRNP70	Positive	Negative
SS-A (Ro)	Positive	Negative
SS-B (La)	Negative	Negative
Anti-Scl-70	Negative	Negative
Anticentromere	Negative	Negative
Jo-1	Negative	Negative

Final Publication and Comments

The final published version with discussion and comments from the experts will appear in the May 2018 issue of *Clinical Chemistry*. To view the case and comments online, go to http://www.clinchem.org/content/vol64/issue5 and follow the link to the Clinical Case Study and Commentaries.

Educational Centers

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