G38 Return of an Old Acquaintance - A Case of Septic Abortion

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After attending this presentation, attendees will become acquainted, or reacquainted, with septic abortion and some of the associated anatomical and microscopic findings.

This presentation will impact the forensic community by reminding everyone of a time when illegal abortions, septicemia and death were more common in the United States. After Roe vs. Wade, the frequency of cases dwindled. New and seasoned medical examiners may benefit from a reminder of what to expect in a septic abortion case, especially in an ever changing political arena.

On January 22, 1973, the Supreme Court decision regarding Roe vs. Wade allowed women to have legal medical abortions in the United States. In the past, women who were seeking an abortion for a reason other than to protect the health of the mother were limited to often questionably sterile and clandestine procedures. Cases of septic deaths from improperly performed procedures and post-operational infections were high. The numbers of such cases dropped off dramatically after the landmark legal decision. Some of the more experienced medical examiners may remember physical and microscopic findings in such cases. Less experienced doctors should be aware of some of the possible findings in a septic abortion case.

A 31-year-old married woman, with four living children, was rushed to a local hospital after becoming hypotensive at a small medical clinic. She was presented to the clinic with a complaint of food poisoning which included nausea, vomiting, diarrhea, and malaise. The clinic diagnosed pyelonephritis and gave her intramuscular ceftriaxone. Within minutes, the woman complained of tongue swelling, shortness of breath, and hypotension likely indicating an allergic reaction.

The question of an allergic reaction to the antibiotics was never specifically addressed during her emergent stay in the hospital. The emergency room doctors noted erythema and tense swelling of the woman's lower extremities. A serum pregnancy test was positive with a human chorionic gonadotropin (hCG) level of 6124 mIU/ml (2-3 week gestation). She was transported to the intensive care unit in extremis. She was intubated and went into cardiac arrest. She was resuscitated once, but a second cardiac arrest was fatal.

Significant medical history went back approximately one month prior when the woman was involved in a motor vehicle collision and broke her foot. On her two week follow up, her primary doctor asked her if she had had a pregnancy test in the ER at the time of the accident. The woman said yes and that she had been on her menses. A thorough record check did not show a pregnancy test was performed. On the day of the terminal event, she had a tampon in place, noted on the pelvic exam.

The woman's mother reported that her daughter was going through a "mid-life" crisis and acting wildly. She got several new tattoos and was having an affair. The mother stated it was entirely possible she became pregnant while having the affair because her husband had a vasectomy.

At autopsy, the tense swelling and erythema of the lower extremities was noted to be in a trouser distribution. The legs had a crepitus-like feel to them. Internal examination of the pelvis found that the uterus had a slightly purple and erythematous fundus but no perforation. The endometrial cavity was full of hemorrhagic debris but no obvious fetal tissue was seen grossly. Microscopic examination of the debris revealed extensive autolysis with a few fragments resembling placental villi. Blood cultures had been performed at the hospital prior to the cardiac arrest. Despite having received one dose of antibiotics at the medical clinic, one of the blood cultures grew *Clostridium perfringens*, which can produce gas gangrene.

Putting the story together, it appeared the woman got pregnant and either had an abortion or a spontaneous miscarriage with retention of products of conception. There was no history she had been to any doctor for an abortion. Neither her mother, friends, nor family knew anything about her being pregnant. If the decedent did get an abortion through a clinic or through personal instrumentation, there were complications that were not addressed. If the uterine contents were retained products of conception from a miscarriage, the sepsis would be explained. There is no confirmation of her pregnancy before the last ER visit because a pregnancy test was not performed at the time of her car accident. The sepsis caused a trouser distribution of swelling and erythema of her lower extremities. The crepitus-like feel of the legs may be indicative of gas gangrene from Clostridium. Cause of death in this case is acute sepsis due to uterine infection.

It is important to note that it would be unusual to find identifiable fetal or placental tissue in a case such as this. The time that is required for the development of the sepsis is long enough for all such tissues to autolyze and be unidentifiable under the microscope. Interviews with family and friends regarding medical and social history are very important in understanding the background of the illness. Also helpful, are discussions with other medical examiners with more experience that have seen a few of these cases. Their wisdom is invaluable.

Abortion, Miscarriage, Septicemia

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