

## Alert report for the prevention of recurrence of medical accidents Number 3

# Deaths from Tubal Rupture due to Ectopic Pregnancy

Fatal hemorrhagic shock due to tubal rupture following implantation of a fertilized egg outside the uterus (ectopic pregnancy) has been reported in two cases conceived through assisted reproductive technology and in one case following spontaneous conception.

	Illustrative Cases
<b>Case 1</b>	<ul style="list-style-type: none"> <li>A patient in her 40s who had had two embryos transferred following in vitro fertilization.</li> <li>The patient called an ambulance with chief complaints of abdominal pain and vomiting, and was presented to the emergency outpatient department. She reported a prior visit to the obstetrics and gynecology department, where she was confirmed to be approximately eight weeks pregnant, and a fetal heartbeat had been detected. The patient was diagnosed with infectious gastroenteritis and placed under observation with antiemetic therapy and intravenous fluid replacement. The following morning, she developed tachycardia, hypotension, and genital hemorrhage. Cardiac arrest occurred several hours later. After the return of spontaneous circulation, a CT scan revealed suspected intraperitoneal and tubal hemorrhage. Uterine artery embolization was performed, but the patient died a few days later.</li> <li>Cause of death: Hemorrhagic shock due to rupture of the interstitial portion of the fallopian tube. Autopsy: present. Ai: present.</li> </ul>
<b>Case 2</b>	<ul style="list-style-type: none"> <li>A patient in her 30s with spontaneous pregnancy.</li> <li>The patient presented with genital hemorrhage. She tested positive for pregnancy, and was diagnosed with threatened abortion due to the absence of a visible gestational sac. Four days later, the genital bleeding increased, and ultrasonography revealed a gestational sac-like structure for which a definitive diagnosis could not be established. A few days later, the patient expelled a “mass” at home and returned to the clinic. She was diagnosed with abortion because the gestational sac-like structure had disappeared. Several days later, the patient revisited the clinic due to abdominal pain and a positive result on a pregnancy test kit. Her symptoms were judged to be part of the post-abortion course based on the findings from transvaginal ultrasonography, and the patient returned home. About one week after the final visit, the patient collapsed at home and was confirmed dead after arrival at the hospital.</li> <li>Cause of death: Hemorrhagic shock due to tubal rupture. Autopsy: present. Ai: unknown.</li> </ul>
<b>Case 3</b>	<ul style="list-style-type: none"> <li>A patient in her 40s who had had an embryo transfer following in vitro fertilization.</li> <li>Nine days after the embryo transfer, the patient tested negative for pregnancy. A few days later, she experienced menstruation, and subsequent hormonal therapy was initiated. At an examination about two weeks later, the patient did not report abdominal pain or other symptoms during transvaginal ultrasonography. The following morning, she developed severe abdominal pain that she had never experienced before, vomiting, and diarrhea, but did not seek medical attention. The patient died at home the next day.</li> <li>Cause of death: Hemorrhagic shock due to tubal rupture. Autopsy: present. Ai: present.</li> </ul>

[Abbreviation] Ai = Autopsy imaging (post-mortem imaging)