Abstract

**Background:** We herein describe an elderly female who died from lying in a prone position with a large pelvic tumor. We examined the tumor and investigated the cause of death.

**Case report:** A female in her early 70s was found dead in a prone position. Her height and weight were 149 cm and 47.5 kg, respectively. Her abdomen was slightly distended, and the abdominal wall was hard. Her diaphragm was elevated. Small bubble foam was noted in the tracheobronchial area. Her heart weighed 278 g. No stenosis was observed in the coronary arteries. Neither an obvious scar nor a hemorrhage was observed in the myocardia. A large tumor was detected near the left ovary that measured $24.2 \times 21.4 \times 7.3$ cm and weighed 2058 g. The surface of the tumor was a mixture of hard and soft areas and had vacuoles. The cut surface showed grayish white fibrous tissue with nodal lesions. The tumor contained collagen fibers. Immunohistochemically, vimentin and $\alpha$-inhibin were positive.

**Conclusion:** Based on these findings, the tumor was diagnosed as a fibroma. She appeared to have died from lying in a prone position with a large pelvic tumor, and hypotensive syndrome may have been caused by the inferior vena cava compression by the large pelvic tumor. In the cases of patients who have large pelvic tumors, they need much care to prevent conditions such as hypotensive syndrome.

**Keywords:** cause of death, hypotensive syndrome, positional asphyxia, large fibroma, immunohistochemistry, forensic autopsy.