Abstract: We report a rare case of ovarian fibrothecoma with massive edema. The patient was a 59-year-old woman with a left ovarian mass measuring 11x10x7 cm. Magnetic resonance images revealed a solid mass showing unhomogeneous content with predominantly high signal intensity on T2-weighted image. Microscopically, the ovarian mass was composed of a cellular area and an edematous hypocellular area. The latter accounted for more than 75% of the tumor. In the cellular area, spindle-shaped or plump tumor cells were randomly distributed or arranged in a fascicular fashion. These cells contained abundant intracytoplasmic lipid. There was dense collagenous connective tissue in the stroma of the cellular areas. In contrast, in the edematous areas spindle or stellate cells were scattered. Alcian blue stain revealed only a small amount of stromal mucin even in the edematous areas. The microscopic findings were consistent with that of fibrothecoma with massive edema. The present case must be differentiated from massive edema of the ovary and sclerosing stromal tumor of the ovary. Immunohistochemistry was not helpful in distinguishing them. The age of the patient and careful histologic observation are important. J. Med. Invest. 47: 148-151, 2000

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