

Shear Wave Elastography in Monitoring of Large Uterine Fibroids after Uterine Artery Embolisation

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Abstract

Structural changes of the myomatous fibroid and the myometrium in 32 patients with large uterine fibroids before the treatment and 3 and 12 months after uterine artery embolisation was evaluated based on the findings of complex shear wave ultrasound elastography. The operation was performed using the interventional system Innova 4100 IQ with spherical microspheres Embosphere from 300 to 900 µm, the clinical efficacy was established in all 32 patients. In the early postoperative period acute endometritis developed in 3 patients due to the expulsion of the submucosal fibroid, required surgery. After the surgery there was the decrease in the size of the dominant uterine fibroid and the uterus and progressive increase in the strength of the fibroid itself and its strength ratio compared to the myometrium that is associated with the structural changes in it after embolisation, first of all due to hyaline degeneration. After 12 months 6 (20,7 %) patients were found pseudocyst in the structure of the uterine fibroid developed due to necrosis of the major part of the fibroid, 2 of them underwent myomectomy based on readings of clinical laboratory and elastography data in order to prevent purulent septic complications.

Key words: Ultrasound Examination, Shear Wave Elastography, Large Uterine Fibroids, Uterine Artery Embolization.

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