

(odds ratio = 4). **Conclusion:** Due to its excellent Sp and PPV, elastography is an efficient method in detecting and characterizing the suspicious lesions to improve the efficiency.

#### OR4.4

### Angiomyelolipoma Size Reduction after Selective Renal Arterial Embolization Using Mixture of Ethanol and Ethiodize Oil Solution: A Retrospective Study in Single-Center Experience

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**Objectives:** The purpose of this study was to evaluate size of renal angiomyelolipoma (AML) after selective renal arterial embolization. The mixture of alcohol and ethiodize oil solution was used as an embolic material. **Methods:** Nine patients with renal AML were treated with selective renal arterial embolization between July 2009 and November 2018. The mixture of alcohol and ethiodize oil solution in a ratio of 3:1 was used as an embolic material. Medical records were reviewed and analyzed. The follow-up computerized tomography scan images were used to evaluate the clinical success and size reduction. **Results:** The mean size of AML before treatment was 11.1 cm (range, 6.8–20.2). The mean size of AML after treatment was 7.9 cm (range, 3.6–13.2). Three (33.3%) patients had bilateral and 6 (66.7%) had unilateral AML. All of patients who had bilateral AML had tuberosus sclerosis complex. Four (44.4%) patients presented with bleeding AML and required emergency embolization. Most of patients (77.8%) need multiple sessions of embolization. No bleeding or tumor growth was observed during follow-up period. Five patients (55.6%) had postembolization symptoms after embolization. None of the patients had major complication. **Conclusion:** The mixture of alcohol and ethiodize oil solution was safe and efficient in the treatment of renal AML.

#### OR4.5

### The Role of Minimally Invasive Treatment Methods in Patients with Bladder Neoplasms with Macrohematuria

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**Objectives:** Often, with prolonged and severe hematuria from the lower urinary tract, urological surgeons have to ligate the internal iliac arteries by the open method, under general anesthesia, while a number of patients have somatic diseases, weakened, and high operational risk. Minimally invasive surgery chemoembolization for bladder cancer can be an alternative in the complex treatment of this terrible disease. **Methods:** In the “National Scientific Center of Oncology and Transplantology” from 2016 to June 2019, 26 patients with bladder cancer underwent “chemoembolization of the lower cystic arteries (arteria vesicalis inferior).” Chemodrug for this procedure was adriamycin at a dosage of 50 mg or cisplatin 50 mg. HepaSphere-

loaded microspheres with dimensions of 300–500 µm were used as a source of chemotherapy drug transportation. Eighteen of 26 patients had bladder cancer T2N0M0 stage, 2 T3NxM0 stages, and 6 T1-M NoM0; all histologically verified transitional cell cancer G2–3. Three of them had an expansion of the upper urinary tract on the one side and one on both sides. Twenty-four patients reported episodic bleeding in the form of blood clots in the urine, while two had total micromaturia. Embolization of the vesicalis arteries was performed under local anesthesia by access according to the Seldinger under X-ray control. Patients were discharged on the 3<sup>rd</sup> day after surgery. Twenty-six patients with bladder cancer were given two courses of chemoembolization with an interval of 1 month. **Results:** The results of the treatment were evaluated according to the general condition of the patients, complaints, the absence of hematuria, a decrease in the size of the tumor, and the positive dynamics of the blood test indicators. In the first 2 days, three patients experienced pain syndrome, which passed after the use of nonnarcotic analgesics. Hyperthermia, local pathological changes in the introduction of a vascular catheter into the femoral artery, was not observed. After 2 months at the control examination, patients had no episodes of gross hematuria, and the blood tests improved. According to magnetic resonance imaging, computed tomography, ultrasound, and cystoscopy, tumor size decreased on average by >25% after two courses of chemoembolization. Six patients 3 months after the first chemoembolization surgical interventions were performed in the volume of Transurethral resection of the prostate – 4, open resection – 1, and cystectomy – 1. The histology of the removed tumor confirmed therapeutic necrosis of the tumor tissue. Three patients with advanced disease were referred for further chemoradiation treatment and three with the initial stage of the process continue to be observed with the recommendation of local chemotherapy. **Conclusion:** Thus, chemoembolization is a minimally invasive, but effective method of treatment for bleeding from the bladder. It needs widespread use among patients when comorbidities do not allow the implementation of bulk routine treatment methods. A small number of patients and a short follow-up period do not give grounds for definitive conclusions in the duration of treatment and the number of chemoembolizations sessions in bladder cancer.

#### OR4.6

### An Experimental Study of Early-Degradable Fish-Derived Spherical Gelatin Microparticles as an Embolic Agent in a Rabbit Renal Model

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**Objectives:** To compare the degradation periods of different molecular weight (MW) fish-derived spherical gelatin microparticles (GMPs) via transauricular arterial access in a rabbit model. **Methods:** Twenty-four rabbits, weighing 2.7–3.8 kg, were used in the study. Renal angiography was performed with a microcatheter via transauricular approach. Segmental renal arteries were embolized using two different MW spherical GMPs (155–350 µm; low MW: 5–15 kDa; high MW: 15–30 kDa). In each group, rabbits were sacrificed immediately after