Transarterial Chemoembolisation for Inoperable Hepatocellular Carcinoma – a Single Center 6-year Experience

Edgars Maļcevs¹, Artūrs Ozoliņš²,³, Andris Veiss¹, Jānis Vilmanis²,³, Jānis Šavlovskis³, Jānis Gardovskis²,¹

¹ Pauls Stradiņš Clinical University Hospital, Surgery Clinic, Latvia
² Rīga Stradiņš University, Department of Surgery, Latvia
³ Pauls Stradiņš Clinical University Hospital, Institute of Radiology, Latvia

Introduction. Hepatocellular carcinoma (HCC) is the sixth most common cancer worldwide in terms of the number of cases, and it is the third most common cause of death from cancer. Targeted transarterial chemoembolisation (TACE) therapy is currently the standard treatment for advanced HCC in selected cases.

Aim, Materials and Methods. The aim of the retrospective study was to analyse manipulation efficiency and survival outcomes with advanced HCC patients who underwent TACE in the time period between 2011 and 2016. Biopsy and CT imaging diagnosed a total of 37 patients with advanced HCC. Patients were evaluated according to Barcelona Clinic Liver Cancer (BCLC) staging by a multidisciplinary team and advised TACE as the treatment option.

Results. Mean patient age was 64.21 ± 11.05 years. The female-to-male ratio was 1.86. Tumor was localised in right, left and both lobes in 26, 3, 14 cases respectively. Tumor size was > 5 cm in 24 (55.8 %) cases and < 5 cm in 19 cases (44.2 %). Treatment was done by DC Bead™ 100-300µm or Hepasphere™ 150–200 µm. Five patients (11.6 %) received 1 TACE procedure, 11 patients (25.6 %) received 2, nine patients (20.9 %) received 3, eight patients (18.6 %) received 4 and ten patients (23.3 %) received > 4 TACE procedures, respectively. For treatment result evaluation we used modified RECIST – relation between necrotic and still vascularised lesions.

Conclusion. Chemoembolisation with or without doxorubicin microspheres is a safe and effective procedure for advanced inoperable HCC. A single center experience showed that studies and routine protocol are required for analysing the outcomes and efficacy of TACE.