

COMPARATIVE STUDY BETWEEN DC BEAD® LOADED WITH DOXORUBICIN AND CONVENTIONAL TRANSARTERIAL CHEMOEMBOLIZATION IN THE TREATMENT OF HEPATOCELLULAR CARCINOMA IN KOREA

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Background and Aims: Transarterial chemoembolization (TACE) has been widely used as treatment in hepatocellular carcinoma. In order to maximize the therapeutic efficacy, Doxorubicin loaded drug eluting bead has been developed to deliver higher doses of chemotherapeutic agent and to prolong contact time with tumor. The purpose of this study was to evaluate the efficacy and safety of DC bead® TACE in comparison with conventional TACE.

Methods: One hundred fifteen patients who underwent transarterial chemoembolization between May, 2005 and Aug, 2010 were retrospectively enrolled. We compared HCC patients (n=46) who had underwent TACE with DC bead® to controls (n=69) who had received conventional TACE. The primary endpoint was treatment response at 1 and 2 months following TACE according to modified RECIST criteria. The primary safety endpoint was treatment-related liver toxicity.

Results: The complete response of the DC bead® group at 1 and 2 month was significantly better than that of conventional TACE group (50% vs. 18.8% P=0.001, 60.8% vs. 36.2% P=0.013, respectively). Subgroup analysis conducted in patient with BCLC stage B confirmed significantly higher complete and objective response rates in patients receiving DC bead® than those treated with conventional TACE. There was no statistically significant difference in liver toxicity between the DC bead® and conventional TACE group (P>0.05).

Conclusions: Transarterial chemoembolization with DC bead® showed better treatment response compared with conventional TACE. There was no difference of treatment-related toxicity between both groups. This may appear to be a feasible and promising approach in the treatment of HCC.