Acute renal failure after transarterial chemoembolization

Doctors, in the latest issue of Alimentary Pharmacology and Therapeutics, find that acute renal failure after transarterial chemoembolization for hepatocellular carcinoma appears to be dose-related.

Transarterial chemoembolization is effective for hepatocellular carcinoma.

However, acute renal failure may occur after transarterial chemoembolization due to the radiocontrast agent.

In this study, doctors from Taiwan investigated the incidence, risk factors and outcome of acute renal failure after transarterial chemoembolization.

The team analyzed 235 hepatocellular carcinoma patients who underwent 843 transarterial chemoembolization treatment sessions.

Acute renal failure developed in 24% of patients.

The team found that the estimated risk of developing acute renal failure was 7% in each treatment session.

The team compared the episodes of transarterial chemoembolization with and without acute renal failure. They found that Child-Pugh class B (OR 2.6) and treatment session (OR 1.3) were independent risk factors of acute renal failure.

Overall, 27 patients had prolonged renal function impairment.

Multivariate analysis found that Child-Pugh class B (OR 4.3) and diabetes mellitus (OR 5.2) were linked with prolonged acute renal failure. This independently predicted a decreased survival (RR 2.3).

Dr Huo's team concluded, "Acute renal failure after transarterial chemoembolization appears to be dose-related and is associated with the severity of cirrhosis".

"Patients with diabetes mellitus or Child-Pugh class B more frequently develop prolonged acute renal failure, which in turn is a poor prognostic predictor".

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