Abstract Title:A comparative study of the recent adverse reactions caused by licartin treatment by two different routes

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Purpose: To assess the security and advantages of peripheral intravenous bolus of licartin for the treatment of advanced HCC, a contrast research of the recent adverse reactions caused by Licartin treatment via two different routes was carried out.

METHODS: Clinical data was collected and analyzed using 54 cases patients (45 males, 9 females, age 33-80 years) with advanced HCC injected Licartin in Tianjin Medical University Cancer Institute and Hospital from October 2010 to March 2013. The patients were divided into vein groups(n=33) that injected Licartin through peripheral intravenous) and artery group (n=21) that injected Licartin through hepatic artery associated TACE, the balance of groups was tested by $\chi 2$ and two-sample t test. Blood routine examination, liver and kidney function and thyroid function between the two groups (before treatment 1 week, after treatment 4 and 12 weeks) were collected and compared，as well as the emergence of adverse reaction rate and progression rate. Ten days after Licartin treatment, all patients were received γimaging to access the drug distribution in vivo. $\chi 2$ test and two sample t-tests.

RESULTS: The vein group showed temporary drug-related leucopenia （$\chi 2=7.041$，$P < 0.05$） and an increased level of STB (serum total bilirubin) （$\chi 2=10.297$，$P < 0.05$）, while the artery group demonstrated a drug-related decreased level of WBC (white blood cells) （$\chi 2=8.949$，$P < 0.05$） and platelets (PLTs) （$\chi 2= 8.778$，$P < 0.05$）. All of the values eventually resumed to normal 12 weeks after the treatment ended. The difference of incidence of adverse reactions between two groups in patients ALT normal baseline before treatment was statistically significant （$\chi 2=5.718$，$P < 0.05$）, while other indicators Hb, WBC, N （neutrophilicgranulocyte）, PLT, AST （glutamic-oxaloacetic transaminase）, STB, SDB （direct bilirubin）, BUN （blood urea nitrogen） and Cr （creatinine） between two groups have no significant difference .There were no obvious differences in HAMA reaction rate, drug distribution in vivo, thyroid function damage and the incidence of adverse reactions between the two groups of patients.

Conclusions: In conclusion, this study demonstrated that there was no significant difference in terms of safety using

Licartin through a peripheral intravenous bolus or a hepatic artery to treat patients with advanced HCC.