

Clinical Pharmacokinetics of Cisplatin in Patients with Malignant Tumor of Limb (MAL) by Hyperthermic Antiplastic Perfusion (HAP) Treatment

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Objective: To study the pharmacokinetics of cisplatin in MAL patients by the treatment of HAP, a quick and sensitive UV spectrometry was used to determine the cisplatin concentrations in plasma.

Methods: The patients were divided into 3 groups. I: The systemic blood cisplatin concentrations (SBCC) were determined after cisplatin (2mg/kg) iv gtt. II: The local and the SBCC were determined during HAP (3mg/kg). 200ml blood was discarded after HAP. The SBCC were determined for 72 hours. III: 200ml blood returned to systemic circulation after HAP. Other performances were same as II.

Results: During HAP the cisplatin concentrations in local blood were 3-15 folds higher than that in systemic blood at the same time. After HAP SBCC of III were close to that of II at the same time. After HAP of 72 hours SBCC was still higher than that of 50% inhibiting cancer concentration in vitro. There was no significant deference in pharmacokinetic parameters within 3 groups. The toxicity in III was not increased.

Conclusion: The method without discarding blood after HAP is confirmed useful in clinic.

Biography

Prof. Jianshi Lou is the director of Dept. of Pharmacology, guided about 10 Ph D students and 40 MM students in his Lab. He has published more than 100 papers in repute journals and Chinese journals. Now he served as Vice-Chairmen of The Tianjin Pharmacological Society; Vice-Chairmen of The Tianjin Pharmaceutical Society; Vice-Chairmen, Branch of Mathematics Pharmacology, Chinese Pharmacological Society.