

Pharmacokinetic study of cisplatin combined in fibrin glue intraperitoneal chemotherapy in patients with gastrointestinal cancer.

[Chinese]

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Abstract:

OBJECTIVE: To study the cisplatin combined in fibrin glue intraperitoneal chemotherapy in patients with gastrointestinal cancer. **METHODS:** 38 cases with gastrointestinal cancer were divided into two groups. Cisplatin combined in fibrin glue intraperitoneal chemotherapy were implanted in 20 patients undergoing gastrointestinal cancer surgery in the experimental group, while cisplatin were implanted in 18 cases undergoing gastrointestinal cancer surgery served as controls. The cisplatin drug concentration in plasma and urine, half-life ($t_{1/2}$), apparent volume of distribution (V_d), area under curve (AUC) were compared among the two groups. **RESULTS:** Cisplatin combined in fibrin glue intraperitoneal chemotherapy had high apparent volume of distribution, long half life and small area under the curve compared with controls. The differences were statistically significant ($P < 0.01$). **CONCLUSION:** Cisplatin combined in fibrin glue intraperitoneal chemotherapy can prolong the regional action time and improve the regional concentration of chemotherapeutic drugs.