Observation on the Effect of Kanglaite Injection in the Treatment of Advanced Renal Carcinoma

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Abstract

To study the therapeutic effect of Kanglaite Injection (KLT) in the treatment of advanced renal carcinoma, 36 advanced patients were randomly divided into KLT treatment group and control group. As a result the treatment group had an increase in body weight as 66.7%, KPS elevation as 83.3%, symptoms improvement as 88.7% and the total response rate as 77.8%. However, the percentages in control group were 11.1%, 22.2%, 27.8% and 16.7% respectively. The preliminary study results showed that KLT Injection could inhibit tumor cells growth and improve life qualities of patients with advanced renal cancer without any toxic and side effects.

Key Words

Kidney tumor, Traditional Chinese Medicine therapy, coix seed extract, therapeutic application, injection, randomly controlled trials

Renal cancer is not sensitive to chemotherapy and has no ideal therapeutic scheme nowadays. The conventional treatment for advanced renal cancer is mainly to adopt supportive or symptomatic measures. In our clinical study 36 patients with advanced renal cancer were treated with KLT and supportive therapy respectively. The report is presented below.

1. Clinical Materials

1.1 Selection of patients

36 patients with advanced renal cancer were selected for this study with 24 male and 12 female and age between 35~65 (mean 50.7 years old). Pathological types: clear cell carcinoma (14 cases), granular cell carcinoma (9 cases), spindle cell carcinoma (5 cases) and mixed cell carcinoma (8 cases). They were associated with metastasis in lung, bone, liver, abdominal cavity, renal vein and inferior vena cava respectively. Karnofsky scores (KPS) >50 and the estimated survival > 2 months. All patients were not treated with other therapy at the same time. They were randomly divided into KLT treatment group (n=18) and supportive control group (n=18).

1.2 Treatment methods

The treatment group: Administer 200 ml KLT Injection by intravenous drip once daily. 20 days as a treatment cycle. After one cycle, the patients would take a rest for 10 days before the second cycle. The therapeutic effects were evaluated after 2 cycles. The control group: Apply the optimal supportive
treatment (including essential nutrition and symptomatic treatment) and therapeutic effects were evaluated after 2 months of medication.

1.3 Results

1.3.1 Evaluation of therapeutic effects

According to the WHO standards for the evaluation of therapeutic effects i.e. complete response (CR), partial response (RP), no change (NC), progressive disease (PD) and response rate (RR).

Results: Treatment group: CR (4 cases), PR (10 cases), NC (2 cases), PD (2 cases), RR=77.8%
Control group: CR (0 case), PR (3 cases), NC (7 cases), PD (8 cases), RR=16.7% There was significant difference between the 2 groups (P<0.01).

1.3.2 Observation was made on the changes of KPS, body weight and symptoms improvement (including fever, pains, asthenia, abdominal distension, nausea and vomiting, etc). The treatment group had an elevation of KPS as 83.3%, increase in body weight as 66.7%, symptoms improvement as 88.9% and the percentages in control group were 22.2%, 11.1%, 27.8% respectively. Significant difference existed between the 2 groups (P<0.01).

2. Discussion

Renal cancer is mainly treated with operation. The prognosis of patients who can't have operation or with tumor metastasis is poor and most of them died within 2 years. Only 10% patients in stage IV could survive for 5 years. About 87% patients had multi-drug resistance. So the effect of chemotherapy was not ideal. The response rate of mono-chemotherapy was only 6% and the best response rate of combined chemotherapy was only 33% [1]. KLT Injection is an anti-cancer product made from Chinese herb - *semen coicis*. The characters of coix seed are sweet and cool in taste, non-toxic, entering the Lung, the liver-bone and the Spleen channels. It has the effect of invigorating the spleen and replenishing qi, reinforcing function of the spleen to remove dampness, relieving tumor size and resolving mass[2]. Previous investigation results showed that KLT had the effect of killing various kinds of tumor cells in vivo and in vitro. The study on cell cycle demonstrated that KLT could make tumor cell cycle stagnated at G0+M stage thus reducing the ratio of DNA synthesis stage (s-stage) and inducing apoptosis of tumor cells[3]. Wang Junjie et al. reported that KLT could induce apoptosis of renal cancer cells, enhance P53 gene expression and inhibit bcl-2 gene expression [4]. The comparison of therapeutic effects between KLT treatment group and optimal supportive treatment group revealed that the response rate of treatment group was 77.8% with KPS elevation as 83.3%, body weight increase as 66.7%, symptom improvement as 88.9%. The percentages in control group were 16.7%, 22.2%, 11.1% and 27.8% respectively. Significant difference existed between the 2 groups (P<0.01). The results above indicated that KLT was a dual-function broad-spectrum anticancer drug. It had the effects of inhibiting and killing cancer cells, improving the body immunological function, providing high energy nutrition, resisting cachexia and improving life quality of patients with advanced cancers.
References


