

放射性¹²⁵I粒子植入治疗老年性中晚期非小细胞肺癌的疗效观察

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Title: The efficacy of radioactive ¹²⁵I particle implantation in the treatment of elderly patients with middle and advanced non-small cell lung cancer

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关键词: 老年; 中晚期非小细胞肺癌; ¹²⁵I粒子; 多西他赛; 顺铂

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摘要: 目的:观察 CT 引导下¹²⁵I粒子植入联合静脉化疗治疗老年性中晚期非小细胞肺癌的临床疗效。方法:选取我院 2015 年 1 月至 2017 年 3 月 72 例被证实为无法手术的中晚期非小细胞肺癌患者,分为研究组 38 例,对照组 34 例。研究组采用放射性¹²⁵I粒子植入联合 TP 方案静脉化疗 4 周期,2 周期静脉化疗后,用三维实体定向放射治疗计划系统(TPS)制定其粒子治疗计划,在 CT 定位引导下,经皮穿刺,按照治疗计划系统(TPS)将放射活度为 0.65-0.8 mCi 的放射性¹²⁵I粒子永久性植入肿瘤内持续照射,处方剂量为 90-120 Gy。对照组采用 TP 方案静脉化疗 4 周期。结果:治疗结束后 1、3、6、9 个月,研究组总有效率分别为 47.4%、55.3%、50.0%、42.1%,对照组总有效率分别为 47.1%、35.3%、23.5%、17.6%;研究组与对照组 1、3 个月的总有效率差异无统计学意义($P > 0.05$),而 6、9 个月的总有效率差异有统计学意义($P < 0.05$)。治疗结束后两组生活质量均有不同程度的改善,但无统计学差异($P > 0.05$)。两组均无严重不良反应发生($P > 0.05$)。研究组较对照组的 median 生存期延长了 3.1 个月,差异有统计学意义($P < 0.05$)。结论:放射性¹²⁵I粒子植入联合 TP 方案静脉化疗治疗老年性中晚期非小细胞肺癌能取得较好的近期临床疗效,不良反应轻微,在临床上值得推广。

Abstract: Objective: To observe the clinical efficacy of CT guided ¹²⁵I particle implantation combined with intravenous chemotherapy in the treatment of elderly patients with middle and advanced non-small cell lung cancer. Methods: From January 2015 to March 2017, 72 patients with advanced non-small cell lung cancer proved to be inoperable were selected to be divided into study group (38 cases) and control group (34 cases). The study group was treated with radioactive ¹²⁵I particle implantation combined with TP intravenous chemotherapy for 4 cycles, and after 2 cycles of intravenous chemotherapy, three dimensional solid directional radiotherapy planning system (TPS) to develop its particle therapy plan. Under the guidance of CT positioning, percutaneous puncture was did. According to TPS, ¹²⁵I particle with radioactivity of 0.65-0.8 mCi were permanently implanted into the tumor with a prescription dose of 90-120 Gy. The control group was treated with TP intravenous chemotherapy for 4 cycles. Results: The total effective rate of the study group was 47.4%, 55.3%, 50.0% and 42.1% respectively after 1, 3, 6 and 9 months after the end of the treatment. The total effective rate of the control group was 47.1%, 35.3%, 23.5% and 17.6%, respectively. The total effective difference between the study group and the control group in 1 and 3 months was not statistically significant ($P > 0.05$), and was statistically significant in 6 and 9 months ($P < 0.05$). After treatment, the quality of life of the two groups improved to varying degrees, but there was no significant difference ($P > 0.05$). No serious adverse reactions occurred in the two groups ($P > 0.05$). The median survival time of the study group was prolonged by 3.1 months compared with that of the control group, and the difference was statistically significant ($P < 0.05$). Conclusion: Radioactive ¹²⁵I particle implantation combined with TP intravenous chemotherapy in the

treatment of elderly patients with middle and advanced non-small cell lung cancer can achieve better short-term clinical efficacy. The adverse reaction is mild, and it is worth popularizing in clinical application.

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