

## Treatment of rectal carcinoma with a specially designed anus-protected localized negative pressure type cryoprobe

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### Abstract

**AIM:** To perform cryosurgery for 100 rectal carcinoma with a specially designed anus-protected localized negative pressure type cryoprobe observed its clinical curative effects.

**METHODS:** One hundred cases of rectal carcinoma (56 men, 44 women) were diagnosed by finger examination, rectal scope and biopsy. Clinically, three types were found: cauliflower type 43 cases, ulcer type 48 cases, 9 cases and diffused type, pathologically, 84 cases malignant adenoma, 13 cases colloid carcinoma, 2 cases squamous carcinoma and one with metastasis from post-operative urinary bladder carcinoma recurrence. Seventy-three advanced cases showed signs of intestinal obstruction because of circular stricture of the carcinoma, 17 cases in middle stage and 10 cases in early stage. Cryosurgery was performed with a specially designed anus-protected localized negative pressure type cryoprobe (the patent No.

is ZL92235996.2.). The diameter of the freezing zone was about 4 cm.

**RESULTS:** Patients in early and middle stages received cryosurgery 1-3 times. The carcinoma disappeared and no cancer cells was found in biopsy, and there was no recurrence in the 5-year follow-up. The 5-year survival rate was 100%. The cryosurgery was ineffective in 2 cases with liver metastasis and ascites. The other patients in late stages lived one year to 4 years and 3 mo after cryosurgery, averaging 2 years and 7 mo. One day after the cryosurgery the intestinal obstruction were remitted in late stage patients, with an effectiveness rate of 100%.

**CONCLUSION:** The tumor tissues can be killed by cryosurgery. The diameter of the freezing zone was about 4 cm, which could reach the lymph nodes of the pelvic cavity and the nodes near the lower intestinal mesentery vessels. There was no local stimulus, compression and distention. Cancer cells could be frozen to death before blood metastasis occurred. If it is combined with chemical therapy, the clinical effects may be even better.

**Key words:** Rectal neoplasms/therapy; Rectal neoplasms/pathology; Cryosurgery

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