

The method for treating the rectal cancer comprises gamma teletherapy in the setting of polyradiomodification and the following surgery. Preoperative extended course of fractionated gamma teletherapy is provided in the setting of polyradiomodification comprising oral antimetabolite Ftorafur belonging to fluoropyrimidines at a daily dose of 800 mg divided in two parts (in the morning and in the evening) in the patients with body mass less than 70 kg or 1200 mg (divided in three parts) in the patients with body mass exceeding 70 kg. Each irradiation session is preceded by intravenous dropwise infusion of L-arginine hydrochloride (Tivortin) in a volume of 100 mL (in 60 minutes prior to irradiation). The initial infusion rate of 10 drops/min with increase up to 30 drops/min in 20 min after the beginning of the infusion. The radical surgery follows in 4-5 weeks after the end of radiotherapy.