

CURRENT APPROACH TO TREATMENT OF DUODENAL ULCER IN PATIENTS OF REPRODUCTIVE AGE

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Low-dose laser radiation has been finding increasingly broader clinical applications because of diversity and efficacy of its actions. Since antiinflammatory, analgesic and regenerative effects of the laser have been documented, we evaluated the efficacy of transcutaneous treatment of duodenal ulcer, a common condition in individuals of reproductive age.

Our study enrolled 93 patients with duodenal ulcer proven by clinical, functional, X-ray and endoscopic studies.

Clinically, ulcer presented as fasting pain in 63.4 percent of the patients and attack-like pain in 61 percent. Pain had a pyloroduodenal location in 78 percent of the patients. It deteriorated at nighttime in 63.3 percent and in morning hours in 33.3 percent of the patients. Two-thirds of the patients had dyspepsia. The most common complaints were heartburn (79.5 percent), nausea (49.4 percent), poor appetite (37.6 percent), eructation (35.4 percent) and constipation (32.2 percent).

The asthenovegetative syndrome was seen in 65 percent of the patients. Asthenia symptoms (undue fatigue, weakness, headaches, dizziness) were most prominent in patients aged older than 30 and neurotic disorders (emotional lability, irritability, aggression) in patients aged 16 to 20. Patients in the age range of 21 to 30 years showed both asthenic and neurotic symptoms.

Endoscopic examination revealed a duodenal ulcer sized up to 10 mm in 78.2 percent of patients, 15 mm in 13.3 percent and 25 mm in 5.3 percent of patients. Perifocal inflammation (edema, hyperemia) was seen in 55 percent of patients and mucosal bleedings in 30 percent. Erosive duodenitis was diagnosed in 27 percent and scar and ulcer lesions of grades 1 and 2 in 52 percent. The lesion was commonly located on the anterior wall of the duodenal bulb.

Fibrogastroduodenoscopy using a Puchok MT-II probe was conducted at one-three days following hospital admission and repeated at five-seven days. Gastrointestinal roentgenoscopy revealed excessive motility and hypertonia of the stomach and especially the duodenum. A scar-ulcer deformity of the duodenal bulb was identified in 50 percent of patients. The bulb was retroflexed in 42 percent of patients, and a niche lesion sized 0.5 to 1.5 cm was found in 23 percent.

General clinical findings of patients were normal. Magnetic-infrared laser (MIL) therapy used a MILTA device and conventional regimens.

The patients were divided into three groups according to therapeutic regimens.

Group 1 (n=46) were controls who were on antacids, histamine blockers and vitamins.

Group 2 (n=37) received conventional therapy and endoscopic laser irradiation of ulcer.

Group 3 (n=10) got MIL therapy in combination with basic drugs.

Comparison of the clinical response in groups 2 and 3 showed that MIL therapy helped a more rapid emotional recovery, return of appetite and reversal of dyspeptic disorders. Spontaneous pain disappeared after the second or third treatment, and the pain syndrome cleared by day 16, which allowed shortening the hospital stay by seven days.

In group 2 patients, pain disappeared by days 15-18. Pain and asthenic/neurotic symptoms of patients on conventional therapy persisted for 25 days or longer.

MIL therapy induced a more rapid and full lesion cicatrization. Lesions scarred on days 18-20 in group 2, on days 15-18 in group 3 and on days 20-25 in controls. The cicatrization time was related to the ulcer diameter and disease duration, as in other reported studies (Korepanov, 1996; Nikolayenkova, 1996).

Lesion scarring in MIL-treated patients with a 6 mm ulcer, a three year history of disease and ages under 30 was seen by days 12-15.

Lesions healed by days 18-20 in patients with ulcers larger than 10 mm, disease histories longer than 5 years and ages over 40.

In the control group, ulcer cicatrization occurred by day 25 and protracted to 30 days in six patients.

The scarring process was endoscopically followed up every seven days. A stable linear "white" scar was seen in 75.1 percent of laser-treated patients (including 40 percent of group 3 patients) and in 21 percent of controls, while a "red scar" was left of ulcer in the remainder of the patients.

CONCLUSION

Earlier ulcer scarring induced by laser treatment shortens the disability period and hospital stay. Transcutaneous laser irradiation is not inferior to the endoscopic modality and can be used in individuals of reproductive age.