

operative day ($P < 0.001 \sim 0.01$). This was due to decreased ATP levels of red cells ($P < 0.01 \sim 0.02$).

We must pay attention to such hemorheological changes following surgery.

374. Treatment of Cervical Erosion —The Result of Therapy with High-frequency Coagulation and a Comparison with other Types of Therapy—

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In this study, the efficacy of treatment of cervical erosion with high-frequency coagulation has been compared with that of various other therapies. The efficacy of treatment with high frequency coagulation method was based on a national aggregate of 13,420 cases, which were mainly reported by practitioners in 101 medical facilities.

Among 11,824 patients who could be confirmed immediately after the treatment, 11,165 (94.4%) showed complete disappearance of the cervical erosion within six weeks after coagulation, resulting in a state of complete cure. The corresponding rate is reported to be 62% for freezing therapy, 81% for cold coagulation and 90% for CO₂ laser beams. Thus, there is an obviously significant difference between the treatment with high-frequency coagulation and other types of therapy.

Follow-up after treatment revealed no recurrence of cervical erosion in any patient. Subsequent research showed three cases of cancer of cervix (0.02%), which accounts for less than one tenth of the rate of detecting cervical cancer on mass screening (0.3%).

As is widely known, the principle of treatment for cervical erosion is to completely remove of the columnar epithelial tissue in the eroded surface and to expect the replace with squamous cells from the surrounding area. The process of healing in freezing therapy and cold coagulation is similar to spontaneous healing with proliferation of reserve cells because of the relatively shallow depth of coagulation involved. In contrast, a shorter period of treatment and a higher healing rate are obtained by high-frequency coagulation and CO₂ laser beams because these

methods produce complete destruction of the glandular system and rapid restoration of squamous cells.

375. Yag Laser Therapy for Cervical Disease

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A conservative therapy for cervical disease has been enabled by applying newly developed laser beams. YAG laser has the higher power density, the more destructive and coagulative ability among those various beams.

Present paper is to report our experience of YAG laser coagulator, Molelectron Model 8000 with 1.06 μ m wave length and 110W maximum power. Seventy-eight patients; 48 with portio erosion, 28 with dysplasia (mild 5, moderate 9, severe 14) and 2 with carcinoma in situ were placed into therapy and those entire transformation zone and abnormal lesion were vaporized by the laser (30W, spot size 3 mm, continuous wave) through the colposcope to the depth of 5 mm or until no further mucus enter the crater. The treatment is easily performed at outpatient clinic without anesthesia. Following therapy, patients have been followed being examined by colposcope and cytology. Colposcopic finding demonstrated complete healing without cervical stenosis, scarring or infection in 5 or 6 weeks. Delayed bleeding (massive and arterial bleeding) occurred in 7.7% which could be easily coagulated by the defocused beam. A patient with moderate dysplasia developed residual lesion. Thus, cure rate is 96.7% during 3 to 15 month follow up. We regard the YAG laser as an effective clinical method in the treatment of cervical disease.

376. Experimental Salpingostomy by CO₂ Laser Microsurgery

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Hydrosalpinx is one of the most common causes of female infertility. Microsurgical technique has improved the patency rate after salpingostomy up to 90%. However, the pregnancy rate still remains far