328 Antitumor effect of hyperthermia in the treatment of gynecological malignancy. M.Kinugasa, R.Nishino, A.Kimura, F.Ohtsu, K.Hasegawa, K.Takeuchi, Dept.Obst. and Gynec.,Hyogo Medical Center for Adults,Hyogo.

The subjects were fifteen patients with cervical cancer, two with vaginal cancer and one with vulvar cancer, who were treated with hyperthermia by an RF capacitive heating system "Endoradiotherm 100A" in combination with radiotherapy. Of these, all the patients with cervical cancer underwent radical hysterectomy after irradiation, and radiation effect on the lesion were compared cytologically and histologically for different dose with that of their control group of 50 patients who had preoperative irradiation alone. At each dose of 10, 30 and 40Gy., more favorable effect were observed in the hyperthermia group than in the control group in both cytological and histological study. Of three patients with vaginal and vulvar cancer, two had no viable cancer cells when the combination therapy of hyperthermia and external irradiation was over, and the other patient with vaginal cancer also obtained complete remission after additional intracavitary irradiation. These results suggest that hyperthermia may have favorable antitumor effect on gynecological malignancy.

329 Intraperitoneal administration of OK432 followed by intraperitoneal rIL-2 (recombinant interleukin 2) on peritonitis carcinomatosa. Y. Kanaoka,N.Umesaki,M.Kawabata,H.Tsuda,T.Asada,S.Uda,T.Sugawa, Dept.Obst.and Gynec.,Osaka City Univ.Med.Sch.

Effect of OK432 administered intraperitoneally two days prior to intraperitoneal administration course of rIL-2 was examined in animal malignant ascites models and clinical cases. Animal experiment: C3H/He mice intraperitoneally transplanted 1.0×10^6 of MH134 hepatoma cells and BALB/c mice intraperitoneally transplanted 1.0×10^5 of Meth-A fibrosarcoma cells were administered 1 KE/animal of OK432 on day 7 and from day 9 to day 28, 20 μ of rIL-2 was intraperitoneally administered. Survival period was prolonged and about 30% of mice were cured in OK432 and rIL-2 group, while control group, OK432 on day 7 group and rIL-2 from day 9 to day 28 group were all dead. Clinically in 2 cases of recurrent ovarian carcinoma and one case of recurrent endometrial carcinoma, 10 KE of OK432 was administered followed by 15 day course of intraperitoneal rIL-2. In one ovarian carcinoma patient negative cytological exam. was achieved and ascites decreased to negligible amount. In other 2 cases number of cancer cells, plasma CA 125 level, and volume of ascites decreased. OK432 with IL-2 method was suggested to be useful in control of malignant ascites.

330 The clinical and experimental study of endogenous and exogenous TNF therapy. K.Dobashi,S.Hirata,S.Takeshita,T.Tsujii,K.Sato,K.Ajika,S.Okinaga, K.Arai,T.Seto*,H.Ohshima**,G.Soma**,D.Mizuno**,Department of Obstetrics and Gynecology, Department of 1st Pathology* ,The Biotechnology Research Center**, Teikyo University, Tokyo.

Endogenous and exogenous TNF (E.E.T.) therapy is composed of two different TNF therapeutic approaches complementary with each other. One is endogenous TNF therapy to induce endogenous TNF by two commercially available BRMs (rIFN-γ and OK-432) in patients with lung, liver metastases. In clinical trials, PR was observed in cases with lung metastasis (3/8) and MR was observed in 1/8 cases with liver metastasis. The other is a complementary TNF therapy to administer a new rTNF-S either systemically or locally to patients with metastatic lesions in organs other than liver and lung. In clinical trials, CR observed in 2/5 cases with malignant ascites. We could get the same results of E.E.T. therapy in the rabbit VX-2 carcinoma model which is easily metastatic and difficult to be cured. PR was observed in VX-2 model by E.E.T. with ADM combination therapy. From these results, E.E.T. therapy would be an effective novel antitumor therapy in recurrent and/or metastatic tumor in gynecologic malignancies.