Leuprolide Acetate in Papillary Serous Ovarian Tumor (Stage IIIC) of Low Malignant Potential: A Case Report of a Dramatic Tumor Response

DÜŞÜK MALIGNITE POTANSİYELİ GÖSTEREN EVRE III PAPİLLER SERÖZ OVARİAN TÜMÖRLÜ BİR OLGUDA LEUPROLİD ASETAT İLE ELDE EDİLEN DRAMATİK TÜMÖR YANITI

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SUMMARY

Objective: To investigate the results of Leuprolide acetate in a patient with ovarian tumor of malignant potential.

irtstution : M.D. Anderson Cancer Center, Department of Gynecologic Oncology.

Materials and Method: We present a 27 -year- old female underwent a total abdominal hysterectomy and bilateral salpingo-oophorectorny with suboptimal tumor reductive surgery tor ovarian tumor of low malignant potential.

Results: She has received leuprolide acetate for 5 years and is alive with no evidence of disease.

Keywords: Low malignant potential, ovarian tumor, leuprolide acetate

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ÖZET

Amaç: Düşük malignite potansiyeli gösteren over tümörlü bir hastada leuprolid asetatın etkisini araştırmak.

Çatışmanın yapıldığı yen The University of Texas, M.D. Anderson Cancer Center Jinekolojik Onkoloji Bölümü

Materyal ve Metod: Düşük malinite potansiyelli ovarian tümör nedeniyle total abdominal histerektomi, bilateral salpingo-coforektomi, suboptimal tümör redüktiv cerrahi yapılan 27 yaşında bir hasta sunuldu.

Sonuç: 5 yıl boyunca leuprolid asetat alan bu hasta hiçbir hastalık kanıtı olmaksızın yaşamını sürdürmektedir.

Anahtar kelimeler: Düşük Malignansi, ovarian tümör, leuprolid asetat

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Epithelial tumors of *low* malignant potential (LMP) comprise approximately 4-14% of all ovarian malignancies (1). Survival is muc.i higher for patients with ovarian tumors of LMP (99% for stage I, 92% for stage II and III) than for patients with invasive ovarian carcinoma (2) In young patients with early-stage ovarian tumors of LMP, conservative surgery that preserves the uterus and contralateral ovary is acceptable (3,4). However, in young patients with advanced-stage disease, classic optimal debulking surgery is recommended (3,4). The role of adjuvant therapy including radiotherapy, chemotherapy, and hormonal therapy has not yet been established in advanced ovarian tumors of LMP. Here, we report the case of a patient who underwent suboptimal debulking surgery for a stage IIIC ovarian tumor of LMP and has since then received leuprolide acetate for 5 years,

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CASE REPORT

On August 8,1989, a 27-year-old female underwent a total abdominal hysterectomy and bilateral salpingo-oophorectorny with suboptimal tumor reductive surgery for ovarian tumors. During the operation, a metastasis to the left side of the pelvis wall was found but could not be removed because of a serious adhesion. The residue tumor was bigger than 2 cm. Pathology revealed a papillary serous ovarian tumor of LMP with omentum and pelvic wall metastases (stage IIIC). The serum CA-125 level of 33.2 U/mL. The patient was started on monthly intramuscular injections of leuprolide acetate (7.5 mg). After 18 months, pelvic examination revealed no masses, and the serum CA-125 level was 22.2 U/mL The patient tolerated leuprolide acetate very well, despite developing vaginal mucosal atrophy and osteoporosis. Therefore, she was

prescribed a calcium supplement therapy of 1500 mg/day and a vaginal lubricant. The patient Is still receiving monthly intramuscular injections of leuprolide acetate (7.5 mg) and has shown no evidence of disease for 5 years.

DISCUSSION

Compared with invasive epithelial cancers, ovarian tumors of LMP have a favorable prognosis. These tumors recur after surgery at a rate of 10 30% and as late as 10 or more years after presentation (5). However, prognostic tumor markers such as CA 125 are not as useful in tumors of LMP as in invasive ovarian carcinomas.

The treatment of stage I ova'"3n tumors of LMP is fairly clear, with many authors advocating surgical excision and careful postoperative follow-up In comparison, the postoperative treatment of more advanced disease is not as well defined A finding of residual tumor after primary surgery carries an unfavorable prognosis The 8 year survival among patients with no residual disease is approximately 100% versus only 60% among patients with residual disease (5).

A role for cisplatin-based chemotherapy In the management of advanced stage ovarian tumors of LMP has been suggested but is under dispute. In one trial conducted by the Gynecologic Oncology Group (GOG), 32 patients with stage Ill optimally debulked ovarian tumors of LMP were randomized to cisplatin plus cyclophosphamide with or without doxorubicin (6). After a median follow-up of 31 7 months, only 1 patient has died, and no cancer was found at that patient's autopsy. The remaining patients are p'ive without clinical evidence of disease at a media" of 30 months. Thus, according to the GOG report it would appear that cisplatin-based chemotherapy cannot be regarded as a routine adjuvant treatment for ovarian tumors of LMP. In another study, Bostwick et al. (7) reported on 14 patients with stage Ill ovarian tumors of LMP. They found that those patients whose disease was incompletely excised at the time of diagnosis were at significantly greater risk of developing persistent or recurrent disease than those whose tumors were completely excised. Bostwick et al. also identified a similar increased risk for patients with stage Ill disease versus stage I or II disease (64% versus 12%). However , even though adjuvant chemotherapy seems to be ineffective in patients with tumors of LMP, it may still be of benefit to a small subset of patients with poor prognostic factors. Hormonal therapy may be an effective alternative. Indeed, tamoxifen and the I H-RH-agonist leuprolide acetate have been shown to inhibit the growth of certain ovaria,i cancer cell lines (8), and the use of tamoxifen or leuprolide acetate alone in chemoresistant ovarian cancers has resulted in modest response rates of 0-23% and 17%, respectively (9-10).

In the case reported here, the patient has received monthly intramuscular injections of leuprolide acetate (7.5 mg) ever since initial suboptimal debulking surgery. She has no evidence of disease after 5 years of this treament. Based then on our experience, we conclude that (a) leuprolide acetate should be considered as a first-line agent in patients with advanced ovarian tumors of LMP and (b) further clinical trials are warranted.

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