

DÜŞÜK DERECELİ ENDOMETRİYAL STROMAL SARKOMLARDA LENF NODU METASTAZI VE REKÜRRENS

LYMPH NODE METASTASES AND PATTERNS OF RECURRENCE IN LOW-GRADE ENDOMETRIAL STROMAL SARCOMA

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ÖZET

Amaç: Bu retrospektif çalışmanın amacı, kliniğimizde opere edilmiş düşük dereceli endometrial stromal sarkom olgularında lenfatik yayılım deneyimimizi paylaşmak ve rekürrens şeklini araştırmaktır.

Hastalar ve Yöntem: Kliniğimizde Ağustos 2001 ile Kasım 2011 arasında düşük dereceli endometriyal stromal sarkom nedeniyle opere edilmiş 14 olgu retrospektif olarak ele alındı. Yüm hastalara histerektomi yapıldı, ancak 6 hastaya pelvik ve/veya paraaortik lenfadenektomi yapıldı (% 43). Üç hasta takip sürecinden ayrıldı. Ortalama takip süresi 51 ay idi.

Bulgular: 3 hastada lenfatik tutulum mevcuttu (%50). 11 takipli hastadan 2'sinde ekstrasuterin tutulum saptandı (%18). İlk cerrahinin suboptimal olmasından dolayı, 3 hastada (%21) ikinci kez operasyona gereksinim oldu.

Sonuç: Bu bulgular göstermektedir ki; düşük dereceli endometrial stromal sarkomlarda lenf nodu insidansı beklenenden daha fazladır. Daha geniş lenf nodu örneklemeleri veya daha fazla hastada lenfadenektomi sonuçları ile daha anlamlı sonuca varılabilir.

Anahtar kelime: Endometriyal stromal sarkom, lenf nodu metastazı

ABSTRACT

Objective: The purpose of this retrospective study is to investigate recurrence patterns and review our experience on lmyphatic dissemination in patients with low-grade endometrial stromal sarcoma.

Study design: A retrospective review yielded 14 patients with ESS (all of them low-grade) who underwent primary surgical resection from August 2001 to November 2011. All patients underwent hysterectomy, whereas pelvic and/or paraaortic lymphadenectomy were performed in 6 patients (43%). Three of these patients had lack of follow-up. Median follow-up time was 51 months.

Results: Lymphatic disease was noted in 3 patients (50%). Extrauterine recurrence was identified in 2 patients out of 11 full follow-up patients (18%). As the primary surgery was suboptimal, 3 patients (21%) were underwent secondary staging surgery.

Conclusion: These findings suggest that the incidence of lymph node involvement in low-grade ESS is higher than expected. More extensive sampling of lymph nodes or complete lymphadenectomy in a larger number of patients may allow a better understanding of the frequency of lymph node involvement in low-grade ESS.

Key Words: Endometrial stromal sarcoma, lymph node metastases

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INTRODUCTION

Uterine sarcomas are rare neoplasms and among them low-grade endometrial stromal sarcoma (ESS) is one of the least common forms of gynecologic malignancy which is characterized by infiltration of myometrium and the lymphovascular spaces by stromal tissue (1). Although growing slowly and recurring frequently, it has a good overall survival (2). Not uncommonly, the diagnosis of ESS is established after hysterectomies; usually performed for benign causes (3). In these cases, typically lymphadenectomy is not performed since it would require an extra operation without a clear benefit. There is a paucity of data about the role and importance of lymphadenectomy in ESS patients; and its effects on prognosis and treatment is not precisely known (4). The objective of this study was to investigate recurrence patterns and to review our experience on lymphatic dissemination in rare low-grade endometrial stromal sarcomas.

MATERIALS AND METHODS

All 14 cases diagnosed as low-grade endometrial stromal sarcoma between August 2001 and November 2011 was retrieved from the files of gynecologic oncology department of Istanbul University, Istanbul Medical Faculty Hospital. Of the 14 cases, three of them had lack of follow-up. And one of these three cases died due to cardiac reasons. Six patients with the diagnosis of low-grade endometrial stromal sarcoma had a surgical procedure with lymph node sampling in their evolution. This sampling consisted of limited lymph node biopsies or an extensive lymph node dissection

and was performed either at the initial surgery or during a subsequent staging procedure.

Lymph nodes were sampled in only 6 of 14 patients. Three patients were initially treated by hysterectomy alone followed, within 1-3 months, by a staging surgery with nodal sampling. Lymph node sampling varied from resection of few grossly abnormal nodes to an extensive lymph node dissection containing up to 35 lymph nodes

RESULTS

The mean age of patients at the time of the initial surgery was 46 years (range: 33-75 years). In eight patients, the initial diagnosis was leiomyoma and in six of them biopsy proved endometrial stromal sarcoma preoperatively. Available follow-up ranged from less than 4 months to 10 years. Three patients were lost to follow-up (one of them died due to cardiac reasons). In those who were followed up, all were alive but two patients had recurrent disease. Results of nodal sampling and sites of recurrences are shown in Table I.

Three of the six patients (50%) had one or two lymph node metastases. All metastases were histologically confirmed. The size of lymph node metastases ranged from micro-metastases to almost complete replacement of the node. Metastases were located in obturator (two patients) and iliac (one patient) lymph nodes.

Two of the 11 patients (full follow-up) experienced multiple recurrences. Recurrences were detected 8 months and 20 months after the initial surgery respectively. All recurrences were intra-abdominal. One patient had omental and perimetrial metastases

Table 1 • General characteristics, follow-up and results of nodal sampling in patients with LGEES

Case #	Age	LN Sampling Y(yes), N(no)	LN (+/Total)	Presence of disease at last follow-up
1	44	Y	2/12	+
2	42	N	-	Lost to follow-up
3	51	N	-	-
4	37	Y	0/5	-
5	44	N	-	-
6	75	N	-	Died of cardiac reasons
7	52	N	-	-
8	44	N	-	Lost to follow-up
9	49	Y	0/9	-
10	53	N	-	-
11	46	Y	1/35	-
12	33	Y	0/6	+
13	35	Y	2/15	-
14	41	N	-	-

after 20 months of her initial surgery although lymphadenectomy was performed and no positive lymph nodes were found. The other patient had prerectal and suprabladder metastases after 8 months of her initial surgery but she had two positive nodes in her first surgery.

DISCUSSION

Metastasizes to lymph nodes in low-grade endometrial stromal sarcoma has rarely been studied. Although hematogeneous dissemination is reported to be the most significant way of metastasis in uterine sarcomas, lymph node metastasis seems to be an important route in ESS (5). The United States' National Cancer Institute has recommended abdominal hysterectomy, bilateral salpingo-oophorectomy, exploration of the whole abdomen, selective pelvic and para-aortic lymphadenectomy and resection of all gross tumor as the preferred surgery for the uterine sarcoma stage I to III (6). However, a recent multicentric review consisting of 105 patients with ESS published by Leath et al (7) showed no benefit of complete surgical staging in women with ESS. In another study on 59 patients with uterine sarcomas, only six were low-grade endometrial stromal sarcomas and no significant difference was found in overall survival between patients treated with total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH-BSO) and lymph node sampling compared to patients treated with TAH-BSO alone (8). Additionally, Goff et al (9) and Ayhan et al (10) found no metastases in the lymph nodes of which had lymph nodes sampled so they concluded that staging laparotomy in such patients was unlikely to be informative. On the contrary, Riopel et al (4) emphasized the importance of lymphadenectomy and found a higher rate of lymph node metastases in low-grade ESS.

Although stage is shown to be the most important prognostic factor in ESS, the additional effect of a lymph node metastasis on prognosis is unknown (2). In one of our three node-positive cases, omental and perimetrial metastases were found 8 months after the surgery. In the other two node-positive cases no recurrences were found till today but, it must be pointed out that the available follow-up is too short; and long term follow-up results are necessary to draw a stronger conclusion.

Recently, there is growing data that the tendency of ESS to metastasize to local lymph nodes is greater than it is believed. Our results show that a

significant proportion of patients with ESS may have nodal metastases. This rate was 50% in our series of patients undergoing lymph node dissection (six patients). It is speculative that this rate might rise or stay around 50% if the rest of our patients with ESS underwent lymphadenectomy. The routine addition of lymphadenectomy in this group of patients may later provide a definite answer to this question.

In conclusion, our results indicate that lymph node metastases in low-grade endometrial stromal sarcoma may be more common than expected. But the recurrence rate may not be affected by the positive lymph nodes. Performing complete lymphadenectomy in this disease may give us a clear picture on the real extension of lymph node involvement but it may not help to prevent recurrences.

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