Malignant Ascites in Female Patients : A Seven-Year Review

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Abstract

Malignant ascites is common in various types of advanced cancer. Our objective was to determine the primary site and the clinical characteristics of female patients presenting with malignant ascites as well as evaluating the outcome. The authors carried out a retrospective study of 118 cases of malignant ascites diagnosed from January 1986 to December 1992 in female patients. Of the 118 cases, the primary site of the neoplasms was gynecologic in 65 cases (cervix 4, endometrium 6, ovary 52, fallopian tube 3) = 55.1 per cent, non-gynecologic 29 cases (GI 18, lymphoma 8, breast 2, kidney 1) = 24.6 per cent, and unknown 24 cases = 20.3 per cent. The mean age of patients in the gynecologic, non-gynecologic and unknown primary site was 50.4, 45.5 and 59.3 years respectively. Surgery combined with chemotherapy was the main treatment in the gynecologic group, whereas, supportive and symptomatic management was the main treatment in the unknown primary group. Treatments in non-gynecologic group were supportive and symptomatic, surgery and chemotherapy. Survival was longer in gynecologic than in the non-gynecologic and the unknown primary groups. The most common primary site of malignant ascites in females was ovarian cancer. In malignant ascites in females caused by gynecologic neoplasms, the prognosis as measured by survival was better than in the non-gynecologic and the unknown primary groups.

Key word : Malignant Ascites - Female - Seven-year Review

Malignant ascites accounts for around 10 per cent of all cases of ascites[1]. It is a common complication of advanced cancer and is usually associated with distressing symptoms and poor prognosis[2,3]. Causes of malignant ascites can be gynecologic (GYN) cancer, gastro-intestinal (GI) cancer, breast cancer, hematologic malignancies or adenocarcinoma of unknown primary origin[4]. In

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the female patients presenting with malignant ascites, it is interesting to know what their primary sites of origin are and whether differences in origin contribute to any difference in clinical setting and survival.

The purpose of this study was to determine the primary sites of the neoplasms, the treatment and the survival of female patients with malignant ascites.

MATERIAL AND METHOD

This retrospective study was performed at Ramathibodi Hospital, Bangkok. The study population were the female patients who had ascites as one of the presenting signs and symptoms, with malignant cells identified in their ascitic fluid from January 1986 to December 1992. The patients' records along with the cytologic and pathologic reports were reviewed. Survival analysis was determined by Kaplan and Meier's method(5).

RESULTS

Between January 1986 and December 1992, 129 female patients were diagnosed with malignant ascites. Since complete data were not available in 11 patients (8.5%), 118 cases (91.5%) were left for analysis. The cytological reports of malignant ascites were adenocarcinoma 89 cases (75.4%), lymphoma six cases (5.2%), Wilms' tumor one case (0.8%), squamous cell carcinoma one case (0.8%) and positive for malignant cells (unspecified) 21 cases (17.8%) (Table 1). The most common primary site of neoplasms in malignant ascites was ovary (52 patients, 44.1%) followed by the GI tract (18 patients, 15.3%) (Table 2). In 65 patients (55.1%) the neoplasms were GYN in origin, 29 patients (24.6%) were non - GYN and in 24 patients (20.3%) the primary sites were unknown. The ages and treatment of the patients are shown in Table 3. The mean age of all patients was 51 years and the mean age of the GYN, non-GYN, and unknown primary patients were not statistically different. In seventy one per cent of patients in the GYN category, the primary neoplasms were treated by surgery combined with chemotherapy, whereas, the main treatment in the unknown primary group was supportive and symptomatic. Treatment in the non - gynecologic group was supportive and symptomatic, surgery and chemotherapy. Fig. 1 shows survival curves of each group. The median survival of the GYN primary group was 48 months, non-GYN 15 months and unknown primary 27 months. The survival was significantly longer in the GYN primary than in the non-GYN (P = 0.0086) and unknown primary groups (P = 0.0138).

Table 1. Cytologic reports of malignant ascites.

	No.	%
Adenocarcinoma	89	75.4
Lymphoma	6	5.2
Wilms' tumor	1	0.8
Squamous cell carcinoma	1	0.8
Positive for malignant cells	21	17.8
Total	118	100

Table 2. Primary sites of neoplasms causing malignant ascites.

	No.	%
Ovary*	52	44.1
Gastro-intestinal tract**	18	15.3
Lymphoma**	8	6.8
Uterine corpus*	6	5.1
Uterine cervix*	4	3.4
Follopian tube*	3	2.5
Breast**	2	1.7
Kidney (Wilms' Tumor)**	1	0.8
Unknown	24	20.3
Total	118	100

* GYN = 65 (55.1%),
** Non-GYN = 29 (24.6%), Unknown = 24 (20.3%)

DISCUSSION

Malignant ascites is a heterogeneous condition depending on the origin of the various neoplasms causing the condition(6,7). In most previous studies, the authors included malignant ascites in both male and female patients; we arbitrarily limited our study to female patients. All patients were confirmed as having malignant ascites by cytology of ascitic fluid. We chose positive cytology as the criterion of malignant ascites because it has a specificity of around 100 per cent(6,8,9). For example, Runyon et al(7) reported 97 per cent positive cytology of ascitic fluid in patients with peritoneal carcinomatosis, three-fourths of cytologic

Table 3. Age and treatment of patients with malignant ascites.

	All cases	Gyn.	Non-Gyn.	Unknown
Age. mean (range)	51.0 (7-90)	50.4 (18-90)	45.5 (7-75)	59.3 (32-87)
Treatment (no.%)				
. Surgery	15 (12.7)	8 (12.3)	6 (20.7)	1 (4.2)
. Chemotherapy	10 (8.5)	1 (1.5)	4 (13.8)	5 (20.8)
. Radiotherapy	1 (0.8)	1 (1.5)	0 (0)	0 (0)
. Surgery + Chemotherapy	58 (49.2)	46 (70.9)	8 (27.6)	4 (16.7)
. Surgery + Radiotherapy	1 (0.8)	1 (1.5)	0 (0)	0 (0)
. Supportive + Symptomatic	33 (28.0)	8 (12.3)	11 (37.9)	14 (58.3)
Total	118 (100)	65 (100)	29 (100)	24 (100)

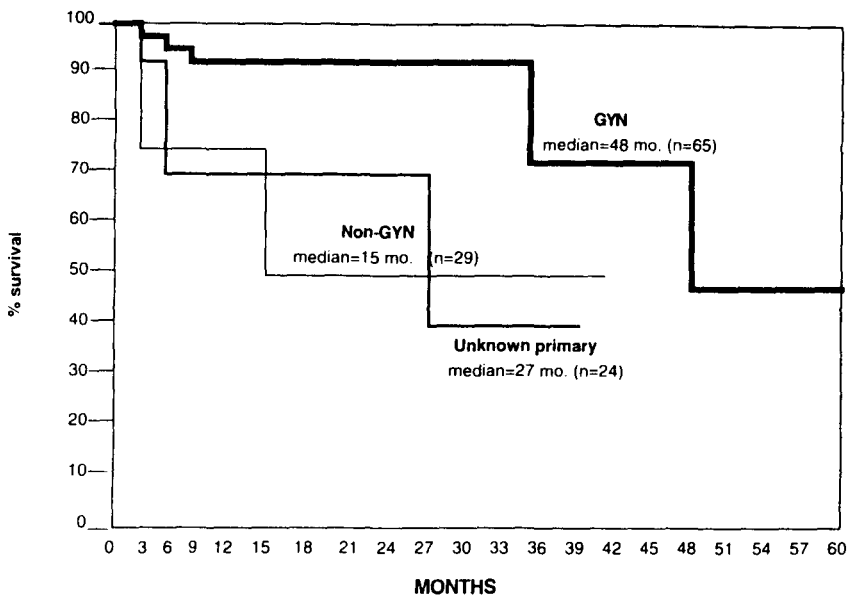

Fig. 1. Survival from time of diagnosis according to the origin of the neoplasms.

reports in this study were adenocarcinoma and the most common primary site of the neoplasms was ovary. In most series ovarian carcinoma is the most common primary tumor[10-13] and accounting for 30-54 per cent of cases. Other common primary sites are pancreas, stomach and uterus, with breast, lung and lymphoma representing the common extra - abdominal sites[12,14]. In our study, more than half of the primary neoplasms were GYN. The mean age of our patients was 51 years, which was younger than in the series of Ringenberg et al (mean = 62 years)[11]. And the mean age of patients with GYN, non-GYN and unknown primary neoplasms was not statistically different. If possible the treatment of malignant ascites should be planned with a knowledge of the primary tumour[6]. Several means of palliative treatment for malignant ascites has been advocated such as paracentesis[15], diuretics [16] peritoneovenous shunt[17-19] and peritoneogastric shunt[20]. In this study, the main treatment for patients with GYN primary neoplasms was surgery combined with chemotherapy, and supportive

and symptomatic treatment for the other groups.

Overall survival of patients with malignant ascites is poor, averaging about 20 weeks from the time of diagnosis[10-12,14], but this markedly depends upon site of origin of the neoplasms. In reviewing the literature on malignant ascites the mean survival for ovarian cancer is 30-35 weeks compared with that of 12-20 weeks for GI neoplasms[14,21]. Previous reports suggested that 6 per cent to 20 per cent of cases of malignant ascites were caused by neoplasms of unknown origin[11, 22,23]. Ringenberg et al[11] reported that the prognosis for patients with malignant ascites of unknown origin is poor (mean survival = 43 days). In our study, the median survival of patients with GYN neoplasms was 48 months, for non-GYN neoplasms 15 months and unknown primary neoplasms 27 months. The survival was significantly longer with GYN primary neoplasms than in the non-GYN and the unknown primary groups.

In summary, our restrospective study of malignant ascites in female patients allows us to make several conclusions. First, the most common cytologic report of malignant ascites was adenocarcinoma. Second, the most common primary site of the neoplasms was ovary. Third, more than half of the patients had neoplasms of GYN origin. Fourth, the main treatment of patients with GYN primary neoplasms was surgery combined with chemotherapy, whereas, in patients with non-GYN and neoplasms of unknown primary origin, the treatment was supportive and symptomatic. Finally, the survival was longer in patients with primary GYN neoplasms than in those with non-GYN neoplasms and neoplasms of unknown primary origin.

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ท้องมานชนิดร้ายในผู้ป่วยสตรีในช่วงเวลา 7 ปี

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ภาวะท้องมานชนิดร้ายเกิดได้จากมะเร็งหลายชนิด วัตถุประสงค์ของการศึกษานี้คือ ต้องการทราบมะเร็งที่เป็นสาเหตุของท้องมานชนิดร้ายและลักษณะทางคลินิกของผู้ป่วยที่มีท้องมานชนิดร้าย รวมถึงการอยู่รอดของผู้ป่วย การศึกษานี้เป็นแบบย้อนหลังในผู้ป่วยสตรี 118 ราย ที่มีท้องมานชนิดร้าย ที่มารักษาที่โรงพยาบาลรามาธิบดี ระหว่างเดือนมกราคม พ.ศ.2529 ถึงเดือนธันวาคม พ.ศ.2535 มะเร็งที่เป็นสาเหตุของท้องมานชนิดร้ายเป็นมะเร็งทางนรีเวช 65 ราย (ปากมดลูก 4, เยื่อบุโพรงมดลูก 6, รังไข่ 52, ท่อนำไข่ 3) คิดเป็นร้อยละ 55.1 มะเร็งที่ไม่ใช่ทางนรีเวช 29 ราย (ทางเดินอาหาร 18, ลิมโฟมา 8, เต้านม 2, ไต 1) คิดเป็นร้อยละ 24.6 และมะเร็งที่ไม่ทราบต้นกำเนิด 24 ราย คิดเป็นร้อยละ 20.3 อายุเฉลี่ยของผู้ป่วยในกลุ่มมะเร็งทางนรีเวช, มะเร็งที่ไม่ใช่ทางนรีเวชและมะเร็งที่ไม่ทราบต้นกำเนิดคือ 50.4, 45.5 และ 59.3 ปี ตามลำดับ การรักษาส่วนใหญ่ของกลุ่มมะเร็งทางนรีเวชคือ การผ่าตัดร่วมกับเคมีบำบัด ในขณะที่ในกลุ่มมะเร็งที่ไม่ทราบต้นกำเนิดคือ การรักษาแบบประคับประคองและตามอาการ ส่วนการรักษาในมะเร็งที่ไม่ใช่ทางนรีเวชมีทั้งรักษาแบบประคับประคอง การผ่าตัดและเคมีบำบัด อัตราการอยู่รอดในกลุ่มมะเร็งทางนรีเวชจะยาวนานกว่ากลุ่มมะเร็งที่ไม่ใช่นรีเวช และมะเร็งที่ไม่ทราบต้นกำเนิด

คำสำคัญ : ท้องมานชนิดร้าย – ผู้ป่วยสตรี – ช่วงเวลาเจ็ดปี

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