

Chapter 17

Cancer of the Placenta

Carol L. Kosary

INTRODUCTION

Cancers of the placenta are rare tumors arising from the products of conception in the uterus. The most common antecedent pregnancy is that of a hydatidiform mole, usually a genetic disorder of pregnancy in which only placental-like tissue is present. Cancer of the placenta most commonly follows a molar pregnancy. It can, however, also follow a normal pregnancy, ectopic pregnancy, or abortion.

MATERIALS AND METHODS

Between 1988-2001, there were 249 cases of cancer of the placenta diagnosed in SEER. The following were excluded from the analysis: patients for whom placental cancer was not the first primary, cases identified through autopsy or death certificate only, persons of unknown race, cases without active follow-up or alive with no survival time, patients less than 15 years old, sarcomas and carcinoids. After these exclusions, 244 cases remained for analysis (Table 17.1).

RESULTS

Age

85% of all cases were diagnosed in women under age 40 and 10% were in women ages 15-19. No cases were seen in women age 70 and older and few cases in women age 50 and over (Table 17.2).

Histology

The majority of these cases were categorized as chorio-carcinoma (over 90%) (Table 17.3).

Staging

The Federation Internationale de Gynecologie et d'Obstetrique (FIGO) and the American Joint Committee

Table 17.1: Cancer of the Placenta: Number of Cases and Exclusions by Reason, 12 SEER Areas, 1988-2001

Number Selected/Remaining	Number Excluded	Reason for Exclusion/selection
249	0	Select 1988-2001 diagnosis (Los Angeles for 1992-2001 only)
249	0	Select first primary only
244	5	Exclude death certificate only or at autopsy, unknown race, and children (<15)

Table 17.2: Cancer of the Placenta: Number and Distribution of Cases and 1-, 2-, 3-, 5-, 8-, 10-Year Relative Survival by Age (15+), 12 SEER Areas, 1988-2001

Age Group (Years)	Cases	Percent	Relative Survival Rate (%)					
			1-Year	2-Year	3-Year	5-Year	8-Year	10-Year
Total (15+)	244	100.0	95.9	93.1	92.1	91.7	89.8	89.0
15-19	25	10.2	100.0	95.5	95.5	95.5	95.5	95.5
20-29	107	43.9	99.1	96.2	96.2	95.1	91.7	89.1
30-39	75	30.7	94.7	92.1	90.6	90.6	90.6	90.6
40-49	29	11.9	86.3	82.9	78.9	78.9	73.0	73.0
50-69	8	3.3	~	~	~	~	~	~
70+	0	0.0	~	~	~	~	~	~

~ Statistic not displayed due to less than 25 cases.

Table 17.3: Cancer of the Placenta: Number and Distribution of Cases and 5-Year Relative Survival Rates (%) by Histology, Ages 15+, 12 SEER Areas, 1988-2001

Histology	ICD-O Code	Cases	Percent	5-Year Relative Survival Rate(%)
Total	8000-9989	244	100.0	91.7
Epidermoid	8051-8130	0	0.0	~
Adenocarcinoma	8140-8147,8160-8162,8180-8221,8250-8506,8520-8550,8560,8570-8573,8940-8941	0	0.0	~
Other Specified Carcinomas	8030-8045,8150-8155,8170-8171,8230-8248,8510-8512,8561-8562,8580-8671	0	0.0	~
Carcinoma, NOS	8010-8022	0	0.0	~
Other Specified Types	8720-8790,8931-8932,8950-8979,8982,9000-9030,9060-9110,9350-9364,9380-9512,9530-9539	242	99.2	91.7
Choriocarcinoma	9100-9101	221	90.6	91.3
All Other Specified Types	8720-8790,8931-8932,8950-8979,8982,9000-9030,9060-9099,9102-9110,9350-9364,9380-9512,9530-9539	21	8.6	~
Unspecified	8000-8004	<5	~	~

~ Statistic not displayed due to less than 25 cases.

Table 17.4: Cancer of the Placenta: Number and Distribution of Cases and 1-, 2-, 3-, 5-, 8-, & 10-Year Relative Survival Rates (%) by AJCC Stage (SEER modified, 3th Edition), Ages 15+, 12 SEER Areas, 1988-2001

AJCC Stage	Cases	Percent	Relative Survival Rate (%)					
			1-Year	2-Year	3-Year	5-Year	8-Year	10-Year
Total	244	100.0	95.9	93.1	92.1	91.7	89.8	89.0
I	65	26.6	100.0	98.5	98.5	98.5	98.5	98.5
II	<5	~	~	~	~	~	~	~
III	<8	~	~	~	~	~	~	~
IV	135	55.3	92.6	88.9	87.2	86.3	85.1	83.2
Unknown/Unstaged	34	13.9	100.0	100.0	100.0	100.0	96.4	96.4

~ Statistic not displayed due to less than 25 cases.

on Cancer (AJCC) have designated staging for cancers of the placenta. Cancer of the placenta was staged using SEER modified AJCC staging, 3rd edition. This was combined with staging for the corpus uteri:

Stage I tumor is confined to the uterus.

Stage II tumor invades the cervix, but has not extended outside the uterus.

Stage III tumor extends outside of the uterus but is confined to the true pelvis.

Stage IV tumor involves the bladder or bowel mucosa or has metastasized to distant sites (including abdominal lymph nodes other than para-aortic, and/or inguinal lymph nodes; excludes metastasis to vagina, pelvic serosa, or adnexa).

Survival by Stage

Over half of the cases were diagnosed at stage IV (55.3%), which is indicative of tumor metastasis to distant sites.

Almost 27% of cases were stage I. Stage II and III were rarely observed (Table 17.4).

Cancer of the placenta is highly curable even at advanced stages. The 5-year relative survival for stage IV cases is 86% and stage I survival is 99%.

DISCUSSION

Ten percent of cases of cancer of the placenta occur in women under the age of 20, while 85% occur in women under 40. Choriocarcinoma is the predominant histologic type. Over half of the patients were diagnosed at stage IV. Despite late staging, placental cancer is a highly curable disease.

REFERENCE

1. Beahrs, OH, Henson DE, Hutter RVP, Myers MH (eds). AJCC Cancer Staging Manual, Third edition. American Joint Committee on Cancer. Philadelphia: Lippincott, 1988.