CANCER CERVIX WITH PREGNANCY

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SUMMARY

Cancer of cervix is the commonest malignancy associated with pregnancy posing a complex problem before us as specialists. The clinical aspects and the management of 16 such patients admitted in the Obstetrics & Gynecology Department of JIPMER, Pondicherry in South India in the last 8 years are discussed in this study. The incidence of cervical cancer was 1 in 2057 deliveries and that of pregnancy in Cancer cervix cases 1 in 319. All the patients belonged to poor socioeconomic status and were not booked during the antenatal period. 55% had advanced stage of the disease and the period of pregnancy was beyond 20 weeks in 63% of cases. 31% of them had no follow-up.

The need to impart Health Education for regular antenatal check up during pregnancy is stressed. The presence of pregnancy should not deter the attending doctors in the periphery to take pap smear in the early pregnancy or at least to visualize the cervix.

INTRODUCTION

Out of all malignancies, carcinoma of cervix is the most common occurring in

association with pregnancy (Barber et al 1963). Fortunately, the incidence of this stressful condition is not so common and has been reported to be varying from 1 in 2205 (Hacker et al 1982) to 1 in 4419 (Allen David

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et al 1995). As very few institutions have had sufficient experience in the management, some authors have conducted collaborative studies (Baltzer et al 1990) to provide optimum management protocols. The present study presents an experience of 8 years in a tertiary level postgraduate institute in Pondicherry, South India.

MATERIALS AND METHODS

The study was carried out in Jawaharlal Nehru Institute Postgraduate Medical Education and Research, a tertiary referral center in Pondicherry (South India) and in the department of Obstetrics and Gynecology. The total number of pregnancies managed in the last 8 years from January 1988 to December 1995 was obtained from the Medical Record Section and the case sheets of patients with carcinoma cervix during pregnancy or within 12 months post partum were reviewed. The information acquired was filled in structured proforma which included age, parity, period of pregnancy, signs and symptoms, mode of delivery and treatment. The follow up data were obtained from the out patient case sheets.

RESULTS

The number of women studied was 16 who were admitted with the diagnosis of invasive cervical cancer associated with pregnancy or postpartum within one year of delivery. The total number of pregnant women admitted during the 8 year study period from January 1988 to January 1995 was 32,920 and that of women treated for cervical cancer was 5020. Thus the incidence of cervical cancer with pregnancy was 1 in 2057 deliveries and 1 in 313 of cervical cancers. The patient characteristics are depicted in the Table -1 as regards the age, parity, FIGO stage, gestational age and treatment in the antenatal patients and in Table -II for the postpartum cases. The mean age was 30.4 years and mean parity was 2.55% of patients had advanced stage of the disease and 63% of patients had more than 20 weeks of pregnancy. None of them had received any antenatal check up. All the patients were referred from outside and had not got a routine antenatal check up. Only 2 patients were in the first trimester and one in the 3rd trimester. Rest of the patients were in the 2nd trimester.

Radical hysterectomy with lymph node dissection was done in the patients who had stage Ib or IIA disease. Radiotherapy was given in stage IIB and IIIb disease following hysterotomy or classical caesarean section depending on the gestational age of the foetus. Only 2 women out of 16 were followed upto 5 years with no residual disease, one of them was postpartum.

	TABLE I				
PATIENT	CHARACTERISTICS				
(ANTEPARTUM)					

SI. No.	Age	Parity	FIGO stage	Gestational period	Treatment
1.	38 yrs	2	Ib	28 Weeks RHND**	Classical C.S
2.	28 yrs	3	IIA	8 Weeks	RHND**
3.	25 yrs	1	IIb	16 Weeks	Hysterotomy R. T*
4.	30 yrs	3	IIb	16 Weeks	Hysterotomy R.T
5.	40 yrs	2	Ib	18 Weeks	RHND
6.	39 yrs	3	Ib	10 Weeks	RHND
7.	27 yrs	2	IIb	24 Weeks (with peri- tonitis)	Subtotal Hysterectomy. R.T.
8.	30 yrs	3	Hb	24 Weeks	Hysterectomy, R.T.
9.	22 yrs	0	IIIb	28 Weeks	Classical CS, R.T. & Chemotherapy
10.	22 yrs	2	IIIb	28 weeks	Classical CS, R.T
11.	35 yrs	1	Ib	30 weeks with sever PIH	Classical CS, R.T
12.	30 yrs	2	IIIb	36 weeks (Twin preg.)	Classical CS, R.T

^{**} RHND - Radical Abdominal hysterectomy with lymhnode dissection.

DUSCUSSION

When cancer occurs in pregnancy, it causes a great stress both to the physician and to the patient. The decision making is complex due to psychological, moral and ethical aspects of the problem. The management issues are more complicated because the simultaneous occurrence of carcinoma of

cervix and pregnancy is a relatively uncommon event. The incidence of this condition in the present study of 1 in 2057 is comparable to that of 1 in 2205 reported by Hacker et al (1982) in their collective data of 1657 cases. More recently, Allen David et al (1995) have shown a much lower incidence of 1 in 4419. When the incidence of

^{*} RT Radiotherapy

SI. No	Age	Parity	Last delivery	Stage	Treatment	
1.	24 yrs	2	5 months	Ib2	1 course CT* (Defaulter)	6 months later R.T
2.	25 yrs	2	1 year	Hb	-	R.T
3	25 yrs	2	1 year	Hb	-	R.T
4.	35 yrs	3	1 year	llb	-	R.T Followed by CT

TABLE II
PATIENTS CHARACTERISTICS (POSTPARTUM)

pregnancy complicating the cases of cervical cancer admitted during the same period was considered, it was again found to be much higher (1 in 313) than other studies (Hacker et al 1982). This may be explained by the fact that JIPMER is a referral institute for cancer and caters to a large number of cancer cases from the adjoining states.

The percentage of asymptomatic patients with cervical cancer during pregnancy is in the range of 3% (Creaseman, et al 1970) to 55% (Sivanesaratnam et al 1993). None of our patients in the present study was asymptomatic, 12 out of 16 were admitted with vaginal bleeding and one patient had severe peritonitis for which emergency laparotomy and subtotal hysterectomy had to be done. These findings reflect the importance of routine speculum examination to visualize the cervix in all pregnant women by medical and paramedical workers. There

is a tendency to presume that cervical cancer cannot be associated with pregnancy.

Surgical treatment, in the form of Radical hysterectomy with pelvic lymphadenectomy with conservation of ovaries in stage Ib to IIa is recommended to be the treatment of choice as pregnancy does not seem to increase operating time, blood loss or major complications (Green 1975). Shepherd (1995) has stressed the need to obey and respect the basic rules of pelvic dissection and tissue planes, thereby reducing the blood loss to much more extent than in a non pregnant patient. However, Thompson et al (1975) have experienced an increased blood loss and major complications like ureterovaginal fistula and pelvic abscess in 4 of their 26 patients. The authors of the present study have not encountered any complication except that the blood loss was slightly more than in the non-pregnant patients,

^{*}C.T. = Chemotherapy

otherwise the dissection was much easier during pregnancy.

As far as the termination of pregnancy with regards to foetal survival is concerned, many studies have reported good results in spite of delaying the treatment by 11-17 weeks to gain maturity of the fetus (Duggan, et al 1993). However, Dudan et al (1973) reported progress of the clinical stage if therapy was delayed. Vaginal route of delivery was not allowed in any of our case including mid-trimester termination of pregnancy which was done by hysterotomy. Recent studies by Hacker et al (1982) & Shepherd (1995), have not confirmed the fact reported by earlier study (Kinch, 1961) that prognosis is worse after vaginal delivery in cases of carcinoma of cervix. However, they also feel that it is better to avoid an increased risk of hemorrhage and infection in vaginal delivery through a cervix which is friable due to the presence of growth. Metastasis to the episiotomy site is another complication reported by different studies (Van Dam Peter A, 1992) & Gordon et al (1989) which can be avoided by resorting to abdominal delivery of the fetus. Primary radiotherapy has been recommened by a few authors (Baltzer et al 1990) for all stages of carcinoma cervix.

CONCLUSIONS

Cancer of cervix associated with pregnancy is an uncommon problem & poses a great challenge as far as the balanced management in view of optimum maternal & fetal outcome in concerned. Radical surgery in the early pregnancy & radiotherapy in the advanced stages seems to be the best choice of treatment.

Visual inspection of the cervix, therefore, should always be done in a pregnant woman by all the doctors & the routine Pap smear, whenever the facilities are available, is mandatory.

In this way, the burden of cervical cancer can be minimised during pregnancy.

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