

EXPERIENCES WITH SURGICAL MANAGEMENT OF CARCINOMA CERVIX

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SUMMARY

Radical surgery was performed on 60 patients with Carcinoma Cervix Stage I, II (a) and early II (b). Histological cell types of the tumor, lymph node involvement, true extension of the tumor, Intra-operative and postoperative complications, close follow-up and recurrence of the disease were studied.

INTRODUCTION

Cancer is an important health problem all over the world. Cancer Cervix is the most common form of cancer in women in most developing countries and the second most common form of cancer in women throughout the world. Early stages of Carcinoma Cervix can be treated by surgery and radiotherapy. Surgery is the preferred mode of management especially in early stages and young patients, for it allows preservation of ovarian functions, vaginal integrity and prevention of osteoporosis. Our experiences with surgical treatment of Carcinoma Cervix

are illustrated in the present series.

Cervical growth begins locally, spreads slowly and invades after a long time. Once the growth has invaded the underlying tissues, it spreads through the lymphatics and blood vessels. Therefore, a surgeon should remove the primary site and all the channels in which the tumor has already extended. This is the enblock concept of 20th century.

MATERIAL AND METHODS

Sixty cases of Carcinoma Cervix in Stage I/II admitted in State Zanana Hospital, Jaipur were included in the present study. Radical surgery was performed to remove the tumor mass

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completely. Detailed preoperative evaluation including clinical staging of the patients were done. To improve preoperative conditions of the patients, clinical problems like anaemia, fluid & electrolyte imbalance etc. were corrected. Transverse incision from one superior iliac spine to another with convexity towards pubic symphysis was given. Lymph nodes were dissected out extraperitoneally followed by radical hysterectomy. After radical surgical procedure, a closed pelvic suction drainage was used extra peritoneally with a vacuum reservoir.

The uterus, adnexa and the dissected lymph nodes were sent for histopathological examination. All cases were carefully followed up at 3 months; interval for two years and then every 6 months by taking Paps. smear and performing per vaginal examination.

OBSERVATIONS

As shown in table No. I, 42 (70%) patients were in Stage I, 15 (25%) cases in Stage IIa and 3(5%) cases were in early Stage IIb.

Table I

The Clinical Staging in 60 Cases

Stages	Number of Cases	Percent
I	42	70%
II (a)	15	25%
II (b)	3	5%

Table No. II shows the histological cell types of the tumor mass - Squamous cell carcinoma was seen in 48 (80%) cases, adenocarcinoma in 8 (13.33%) and adenosquamous Carcinoma in 4 (6.66%) cases.

Table No. III shows the lymph node involvement in different stages of Carcinoma Cervix. In Stage I, 9.52%, cases, Stage II(a) 13.33% and in Stage II(b) 66.66% cases had lymph node involvement. Most common nodes involved were those of obturator chain. Higher risk of recurrence was observed when common iliac nodes were involved. Bilateral involvement of nodes carried the worst prognosis. All cases with

Table II

Histological Differentiation of Tumour

Histology	Number of Cases	Percent
Squamous Cell Carcinoma		
- Well differentiated	24	40%
- moderately differentiated	18	30%
- poorly differentiated	6	10%
Adeno Carcinoma	9	13.33%
Adeno Squamous Carcinoma	4	5.66%

Table III

Clinical staging and lymph node involvement

Stage	Number of Patients	Positive nodes			
		Obturator lymph nodes		External Iliac lymph nodes	
		Number	Percent	Number	Percent
I	42	4	9.52%	2	4.76%
II	15	2	13.33%	2	13.33%
III	3	2	66.66%	2	66.66%

positive nodes were given external cobalt therapy. The total midpelvic dose was 4000-5000 rads in 20 to 25 fractions.

Clinical staging however offers only a rough guide to the extent of disease. Table no. IV shows the comparison of clinical staging and true extension of tumor. Inaccuracies in defining the precise extent of disease occurred in 3 (7.14%) cases of Stage I. In all cases of Stage II(a) and II(b), the operative findings were similar to clinical staging.

Table No. V shows the relation of lymph node metastasis and involvement of cut margins by the growth. Out of 53 cases with free margins, obturator lymph node involvement was seen in 5 (9.43%) cases. With positive cut margins the lymph node involvement was

seen in 3 (42.85%) out of 7 cases.

Table no. VI shows the incidence of intra-operative complications. In all cases, pre-operatively, bladder was catheterised and vaginal packing was done to facilitate anterior and posterior dissection. There was no major intra-operative complication. In two cases bleeding occurred from injury to obturator artery; the same was ligated.

Post operative complications were less due to liberal use of broad-spectrum antibiotics, minimal handling of intestines, good preoperative health status of patient and minimum of four units of blood transfusion given to each patient.

Follow-up was done at 3 months interval for 2 years and then every 6 months. At each visit Pap. smear was

Table IV

Clinical staging and true extension of tumour

Clinical Stage	Number of Patients	Under estimated	Over estimated	Correct diagnosis
Stage I	42	3 (7.14%)	—	39
Stage II	15	—	—	15
Stage III	3	—	—	3

Table V
Cut margins versus lymph node involvement

Cut margins	Number of Patients	Obturator lymph node	
		Number	Percent
Free margins	53	5	9.43%
Positive margins	7	3	42.85%

Table VI
Intra operative complications

Bladder injury	Nil
Ureteric injury	Nil
Bowel injury	Nil
Obturator artery injury	2

taken and pervaginal examination was done. Follow up in our series was not very encouraging as only 30 (50%) patients followed regularly and none had recurrence. Among the defaulters, 5 developed recurrence and they came with advanced disease. Four had central recurrence and one had peripheral recurrence. All developed recurrence within 12 months of surgery. All had positive lymph node involvement and had received a full course of radio therapy.

Patients with central recurrence were sent for brachy-therapy. One died within

6 months of radio therapy due to renal failure. The patient with peripheral recurrence died within a few days of diagnosis. One patient, after 3 years of surgery, on regular follow up, had no local recurrence but developed small cell Carcinoma of lung and died during chemo therapy

DISCUSSION

In our series, higher number of cases were in Stage I which was due to proper screening of high risk groups and hence early diagnosis.

Squamous cell Carcinoma, adenocarcinoma and adenosquamous carcinoma were seen respectively in 80%, 13% and 7% cases. Similar findings are also reported Staff et al 1985.

Lymph node involvement significantly increased with increase in Stage of disease. It was seen in 9.52%, 13.33% and 66.66% in Stage I, II(a) & II(b)

Table VII
Recurrence after surgical treatment

Total Number of patients	Number of recurrence	Central recurrence	Peripheral recurrence
60	5 (8.33%)	4	1

respectively. Piver and Chung reported 42% incidence of pelvic node spread in Stage II(a). Kamat 1988 reported 22% involvement of obturator nodes in state I(b).

In our series 7.14% cases in Stage I were under estimated clinically. These cases had endocervical excavating type of growth in which the lymphatics and vessels were permeated at an early stage.

The involvement of the cut margins, of the removed specimen, by the tumor has a definite bearing on the lymph node metastasis.

Follow up was not very encouraging. Only 50% cases followed regularly. Recurrence was seen in 5 (8.33%) cases. All were of Stage II. All had positive lymph node involvement and had received a full course of post operative radio therapy. Thus the post operative irradiation did not reduce the risk of recurrence as was also shown by Masterson in 1963 and Marrow in 1980. Two patients died after development of

recurrence and one died due to development of small cell carcinoma of lung.

CONCLUSION

Goal of cancer therapy is to eradicate the disease and to assist the patient in developing their full human potential. Surgery is the best mode of management in Stage I disease. The primary site along with all lymphatic channels are removed enblock. Anxiety and depression occur in most women to some extent during the course of illness. The support and affection of family members especially spouse is essential throughout the diagnostic and treatment phase of illness.

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