

DISTANT METASTASIS IN CANCER OF UTERINE CERVIX

B. K. MOHANTY ● S. K. GIRI ● J. MOHANTY ● S. SENAPATI

SUMMARY

A series of 1968 patients of Cancer Cervix presented with 27 cases of distant metastasis of different duration after treatment with surgery, surgery with radiotherapy or radiotherapy alone. The risk of metastasis was equally high in all the stages of the primary, the highest being in Stage IV. Single organ metastasis was more commonly found (88.8%) than multiple organ involvement (11.2%). All the cases were of Squamous Cell Carcinoma which matched their primaries. Poor differentiation of the tumours is an influencing factor for metastasis, showing 66% of metastasis in poor differentiation group. Lesions of different sites like breast, lumbar, supraclavicular node were common and most of the metastasis appeared within one year of treatment.

Emphasis is laid on the fact that whereas no site seems to be immune for metastasis the primary control of the disease should be backed up by good follow-up with routine screening for distant sites with X-Rays + C.T. Scan, more so whenever there is appearance of pain in bones. Palliative radiotherapy and chemotherapy should be administered for better quality of life to such patients.

INTRODUCTION

Cervical Cancer is the commonest cancer among Indian women and it comprises of about 25% of total cancer

patients in any specialised Cancer Centre. The disease, after staying localised for fairly long time, spreads by direct contiguity to other pelvic organs and by lymphatic dissemination to paraaortic nodes. Haematogenous spread is by

*Dept. of Gyn. Oncology Regional Centre for Cancer
Research & Treatment, Cuttack.*

Accepted for Publication on 06.07.1994.

systemic route, portal route being rare, lungs, bones are commoner sites than liver for metastasis.

Sporadic reports of distant metastasis in cases of cancer cervix are always available. There are very few reports in western literature presenting a large series. This study attempts to analyse cancer cervix treated at Regional Centre for Cancer Research and Treatment Cuttack from March 1985 to February 1993 with reference to distant metastasis encountered.

MATERIAL AND METHOD

A total number of 1968 cases of carcinoma cervix were treated in the above mentioned study period. During this time a total 27 patients were detected and managed for metastatic disease where the primary was treated earlier by Wertheim's hysterectomy, surgery and radiotherapy or radiotherapy alone. Analysis was done in relation to stage of the disease, histopathological grading, treatment modalities, duration and sites of appearance of metastasis.

OBSERVATIONS AND DISCUSSION

Distant metastasis developed in 27 patients out of the total 1968 cases of cancer cervix treated. This makes a figure of 1.3% (Table I) in comparison to 15.3% of Carlson et al series (1967), and 30% in Baid et al series (1992). The lower incidence in our series might be due to non attendance of the patient to the hospital because of distance from the institute and economic factors. Metastasis of 1.4% and 2.3% were seen in stage I and II. Stage III patients were the largest group (43%) but showed metastasis in 0.6% and in stage IV it was 3%. Carlson et al (1967) report only 1% distant metastasis in Stage I in contrast to 20.7% in Stage III and 24% in stage IV.

Table II illustrates the distribution of distant metastasis by single or multiple organ involvement according to clinical stage. In this series multiple organ involvement was seen in 3 patients who had metastasis to breast, lumbar vertebra supraclavicular node and lung. Rest of the patients had single organ disease.

Table I

Stage and Distant Metastasis

Stage	No. of patients	Patients developing metastasis	
I	590 (30%)	9	1.4%
II	434 (22%)	10	2.3%
III	846 (43%)	5	0.6%
IV	98 (5%)	3	3%
	1968	27	1.3%

Table II

Stage wise single or multiple organ metastasis

Stage	Single organ	Multiple organ
I	7	2
II	10	Nil
III	5	Nil
IV	2	1
Total	24 (88.8%)	3 (11.2%)

Carlson et al (1967) series had more of multiple organ involvement.

All the cases has squamous cell carcinoma which matched their primaries. Histopathological types seem to influence unusual metastasis in cancer cervix. Poorly differentiated type was seen in 18 cases (66.6%) (Table III) and only 9 cases had better differentiation. Poorly differentiated, infiltrating growths are

always associated with poorer prognosis after primary treatment than the exophytic lesions (Giri et al 1994).

Although distant metastasis may appear any time after treatment (Table IV) 55.5% of single organ metastasis occurred within one year of treatment and 14.8% of multiple involvement appeared within 2 years. Thereafter there was decline. In Carlson et al (1967) series higher rate of 43.2% of metastasis was seen within one year and in Baid et al (1992) series of bone metastasis the median duration was nine months only.

Table V demonstrates the various metastatic sites. Supraclavicular node, lumbar vertebra and lung were the common sites for involvement either alone or in combination. Scar metastasis was seen in 4 cases which is alarming and preventive measure like plenty of saline washing of the wound may be followed as a routine. Carlson showed nodes, lungs and bones being involved in 30-36% of cases. Blythe et al (1975)

Table III

Histopathology and Metastasis

Stage	Well differentiated	Moderately differentiated	Poorly differentiated
I	1	4	4
II	1	1	8
III	1	1	3
IV	—	—	3
Total	3 (11.1%)	6 (22.2%)	18 (66.6%)

All Cases were Squamous Cell Carcinomas

Table IV
Duration of appearance of Metastasis

Time of appearance	Single organ	Multiple organ
During Treatment	1 (3.7%)	2 (7.4%)
1 Year	15 (55.5%)	Nil
1-2 Years	3 (11.1%)	2 (7.4%)
2-3 Years	1 (3.7%)	1 (3.7%)
3-4 Years	2 (7.4%)	
4-5 Years	Nil	1 (3.7%)

Table V
Sites of Metastasis

A. Nodal	
Supraclavicular	7
Axillary	2
Inguinal	1
B. Lung	5
C. Bones	
Lumbar	8
Calcaneum	1
D. Abdomen	
Liver	1
Ileum	2
E. Breast	2
F. Scar	4

Table VI
Treatment and Metastasis

Treatment	No. of Met.
Surgery	8
Surgery + R.T.	4
Radiotherapy	15

and surgery with radiotherapy group showed a lower distant metastasis but this is not a conclusive idea because there were more cases in stage IIB and stage III who received radiotherapy alone.

CONCLUSION

Single organ metastasis was more commonly found (88.8%) than multiple organ involvement (11.2%) and poor differentiation of the tumours is an influencing factor for metastasis. Lesions of different sites like breast, lumbar, supraclavicular node were common and most of the metastasis appeared within one year of treatment.

reported long bone involvement with Pathological fracture.

More number of patients suffered metastasis with primary radiotherapy (Table VI). Wertheim's hysterectomy

Primary control of the disease should be backed up by good follow-up with routine screening for distant sites with x-rays, C.T. scan. Palliative radiotherapy and chemotherapy should be administered for better quality of life.

BIBLIOGRAPHY

1. Carlson V., Delelos L., Fletcher G.H. : *Radiol* : 88;961;1967.
2. Blythe J.G., Patcek J.J., Buchsham H.J. : *Cancer* : 36;575;1975.
3. Baid B.L., Lalit K.S., S. Chander, Rath G.K., S. Kumar, Kriplani S., Batla N. : *Ind. J. of Cancer* : 29;71;1992.
4. Giri S.K., Mohanty J., Mohanty B.K. : *Excerpts Ind. Soc. Oncol. F.* 20;1994.