

STUDIES IN THE MULTIMODAL MANAGEMENT OF LOCALLY ADVANCED UTERINE CERVICAL CANCER

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Introduction

Cancer of the uterine cervix is the second commonest cancer among women in urban India whereas in the rural areas, it occupies the top rank. The Crude Incidence Ratio (CIR) of cervical cancer in urban India is 15.4 per 100,000 and rural is 47.7 per 100,000.

The burden of cervical cancer as per Madras Metropolitan Tumor Registry (MMTR) is 25.3 per 100,000.

The major problem in therapeutic care as in all developing countries is advanced disease. Over 70% of patients report with locally advanced disease (stage IIb and III).

The presentation is a retrospective study of 3892 locally advanced uterine cervical cancer treated at the Institute between 1990 and 1999 with long term survival analysis.

Background

Radiotherapy is the accepted primary treatment for locally advanced cervical cancers. Conventional radiotherapy fails to eradicate pelvic disease in over 60% of cancers. The various clinical trials undertaken at the Institute in an effort to enhance radiation response in locally advanced cervical cancers, starting with chemical sensitization followed by chemo potentiation of radiation response is outlined. With better understanding of radiobiology and improvements in radiotherapy equipments, a carefully planned multimodal treatment in locally advanced cervical cancer has been evolved.

The 5, 10 and 15 year, DFS in 3892 locally advanced cervical cancers is presented. With external beam radiotherapy only, the 5, 10 year DFS in IIB was 49% and 39% and in IIIb 32% and 26% only. With the introduction of concurrent chemo radiation and brachytherapy, a statistically significant improvement in 5 and 10 year survival has been achieved. The 5, 10 year DFS in IIB was 77% and 70% and in IIIb 58% and 55 %.

(p value 0.0001 and 0.0018).

Carefully planned surgery has recorded a survival of 74% and 65 % (5, 10 years) in IIB cases. Addition of surgery in those with residual disease after completion of radiation treatment can contribute significantly to survival. Surgery of course carries morbidities and requires experience.

Conclusion

We conclude that with careful staging and planning based on volume of disease, using CT scan and MRI imaging, radiotherapy can further improve results.

Other areas of study using hyperthermia, dendritic cell vaccine therapy and prognostic markers such as Bcl2, Cmyc also have been undertaken. Gene profiling studies has started recently.