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Aim: To investigate the presence of reproductive tract infections (RTIs) in symptomatic and asymptomatic women in North India and association of SNPs in TNF α gene (rs-281865419 C/T) with susceptibility to these RTIs.

Methods: We collected 100 symptomatic (cases) and 100 asymptomatic women (controls) samples and screened them for RTIs. Then genotyping of TNF- α gene was performed by PCR-RFLP.

Results: Among cases the frequencies of RTIs infection is higher than control. The prevalence of HPV, *C. trachomatis*, *T. vaginalis*, Bacterial vaginosis and *N. gonorrhoeae* are 28% & 6%; 11%, 32% respectively while in controls it was 5%, 2%, 1% & 8% & 1%. In the present study we found that the frequency of wild homozygous genotype (TT) was lower in cases 30% (6/20) as compared to controls 60% (12/20). The frequency of the heterozygous polymorphic genotype (CT) was higher in cases 65% (65/100) as compared to controls 32% (32/100). It was interesting to note that the frequency of the polymorphic homozygous genotype (CC) was higher in cases 15% (15/100) than controls 2% (2/100). While the frequency of the carrier genotype (CT + TT) was found to be more in cases 70% (70/100) than in controls 40/100 (40%). This study shows that T allele may be risk factor for Reproductive tract infections as its percentage is higher in cases as compare to normal controls.

Conclusion: TNF- α rs-281865419 locus may serve as an important biomarker for RTIs predisposition in Indian population though larger sample size is needed to validate the findings.

Cervix: Oral Abstract

Chemoradiation for the management of locally advanced carcinoma uterine cervix: Comparative evaluation of concomitant weekly versus three weekly cisplatin

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Aims and Objectives: To determine and evaluate the difference/s, in terms of tumor control and side effects, between weekly and three weekly cisplatin concomitant with external beam radiotherapy for locally advanced carcinoma of cervix.

Materials and Methods: The study was conducted in Radiotherapy Department, University of Health Sciences, Rohtak (India), on sixty previously untreated, histopathologically proven patients of locally advanced carcinoma of uterine cervix. The patients were treated with External Beam Radiotherapy (EBRT) 50 Gy/25 fractions over 5 weeks and concomitant cisplatin, followed by intra-cavitary HDR brachytherapy (ICBT) 700 cGy to point A; three times, once in a week. The patients were assigned randomly either of two groups of 30 patients each. In Group I (Study Group) the patients received three weekly cisplatin 75 mg/m² for 2 cycles while in Group II (Control Group) the patients received weekly cisplatin 40 mg/m² for 5 cycles. Evaluation of response and toxicity was done weekly during treatment and monthly thereafter up to six months. The data thus obtained was assessed and analysed using La Morte statistical tool. The study was approved by Ethical committee of the institute and quality was periodically monitored by senior consultant and guide.

Results: Stage wise disease response in study and control respectively at the end of treatment was as follows: Stage IIA-CR (80% vs 100%), PR (20% vs 0%); Stage IIB-CR (80% vs 76.47%), PR (20% vs 23.53%); Stage IIIA-CR (60% vs 100%), PR (40% vs 0%); Stage IIIB-CR (60% vs 60%), PR (40% vs 20%), NR (0% vs 20%). Stage wise disease status at the end of sixth month follow up was as follows: Stage IIA – NED (80% vs 100%), RD (20% vs 0%); Stage IIB – NED (80% vs 76.67%), RD (20% vs 23.53%); Stage IIIA – NED (60% vs 100%), RD (40% vs 0%); Stage IIIB - NED (60% vs 60%), RD (40% vs 40%). Tumor response was not significantly different in the two groups with respect to age distribution, rural/urban distribution, histopathological distribution and treatment interruption. Maximum level of hematological toxicity (WHO criteria) observed in study and control group respectively at the end of treatment was as follows: Anaemia; Grade II - 4 (13.33%) in both the groups, Leukopenia; Grade II - 1 (3.33%) vs 0 (0%). The worst acute skin reactions observed by the end of treatment in Group I and II respectively were grade II - 2 (6.67%) vs 0 (0%). The worst acute mucosal reactions were grade II - 5 (16.66%) vs 0 (0%). Upper

Gastrointestinal toxicity (Grade II & III) was 16.7% versus 13.3% respectively. Lower gastrointestinal toxicity (Grade II & III) was 30.0% versus 36.7%. No significant weight loss was observed in either of the groups. Though, all the patients completed the intended treatment, treatment interruption for more than a week was observed in 10 (33.33%) vs 8 (26.67%) patients respectively, due to acute toxicities.

Conclusion: Three weekly cisplatin, concomitant with radiation seems to be the potential, effective and acceptable alternate as standard of treatment for locally advanced carcinoma cervix; especially for increased work load and limited resource setups.

Cervix: Oral Abstract

To evaluate the role of training session on 'Cervical Cancer Screening' in improving knowledge and attitude of Accredited Social Health Activists (ASHA) in East Delhi population

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Background: India has the world's largest load of cervical malignancy. A lot of it can be attributed to lack of cervical cancer screening awareness among the general population. The Accredited Social Health Activists (ASHA) are grass root workers who have good reach in the remote areas, where health care facilities are lacking. Training these ASHAs may increase the general awareness about cervical cancer screening.

Methods: We organized a training programme of 250 ASHA workers in a tertiary care hospital with aim of improving their knowledge and attitude about cervical cancer screening which will eventually improve their practise of training women in general population. It comprised of 5 lectures in language they understand, slogans, posters, question answer session etc. A test comprising of 17 questions was conducted before and after session to check their knowledge and attitude.

Results: There was an overall improvement of 25% in knowledge of the ASHAs i.e. 38% answers were correct in pre-test and 63% were correct in post-test. Questions were pertaining to symptomatology, risk factors, screening methods, their utility and prerequisites of performing the screening tests, when and how often to repeat. Improvement was seen in all the areas. There was improvement in attitude too and most of them wanted themselves (98%), their relatives (100%) and the woman within their area (98%) to be screened for cancer cervix.

Conclusion: It was a small initiative and successful result was obtained after the training session of ASHAs. The impact on general population needs further evaluation.

Cervix: Poster Abstract

Neo-adjuvant chemotherapy followed by surgery versus definitive chemo radiation as treatment for localized carcinoma cervix

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Background: Cervical cancer is ranked as the most common cancer in Indian women, second most common cancer worldwide and the leading cause of death in the developing countries. In the developing countries majority of the patients are diagnosed at locally advanced stages. The standard treatment of locally advanced cervical cancer is concomitant chemoradiation (CTRT) using platinum based chemotherapy. However, some randomized studies have shown improved results for patients receiving neoadjuvant chemotherapy (NACT) followed by surgical resection in comparison to patient receiving radiation alone. The present study was designed to compare response to the treatment and survival of and NACT followed by radical surgery (RS)