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PRELIMINARY RESULTS OF CHEMORADIATION PLUS HYPERTHERMIA AND HIGH-DOSE-RATE BRACHYTHERAPY FOR LOCALLY ADVANCED CERVICAL CARCINOMA

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AIMS

To investigate the outcome of chemoradiation plus hyperthermia (HT) and high-dose-rate brachytherapy (BRT) for locally advanced cervix carcinoma (LACC).
Whether chemoradiotherapy is considered the standard treatment in LACC, the addition of HT to radiotherapy (RT) alone has shown to improve local tumour control and overall survival without affecting treatment related grade 3 to 4 acute or late toxicity in this group of patients.

MATERIALS AND METHODS

From January 2013 to December 2013, 9 patients with LACC or locally recurrent cervical carcinoma (LRCC) following hysterectomy (3 stage IIB, 1 IIIB, 2 IVB and 3 LRCC, respectively) were enrolled on a pilot study combining weekly cisplatin and HT with intensity-modulated radiotherapy (IMRT) followed by BRT. A dose of 50.4 Gy to the pelvic lymph nodes with simultaneous integrated boost (SIB) to the gross tumor volume (GTV) to a total of 61.6 Gy in 28 fractions was delivered within 5.5 weeks. BRT dose was 21 Gy in 3 fractions. Concurrent chemotherapy regimen consisted in weekly cisplatin 40mg/m^2 and HT was delivered once a week.

RESULTS

All patients achieved local control. One patient experienced recurrence outside the pelvis with multiple bone and paraaortic nodal involvement. No treatment related acute or late grade 3 to 4 toxicity was observed.

CONCLUSIONS

This regimen was well tolerated with a good clinical response. The addition of HT to chemoradiotherapy represents a promising new strategy. Multiinstitutional collaborative efforts and longer follow-up are needed to confirm its efficacy.

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