The role of Neoadjuvant chemotherapy in management of locally advanced cancer cervix: A Systemic Review:

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BACKGROUND:

Cervical cancer is the second most common cancer in women. Neoadjuvant chemotherapy for patients with locally advanced cancer cervix might have comparable benefits to concurrent chemoradiotherapy (CCRT), and few side effects.

Study Objectives:

This systemic review aimed to provide comprehensive summary of the benefits of neoadjuvant chemotherapy in the management of locally advanced cancer cervix stages IB2 (tumor >4.0 cm) till IIIB (tumor extends to the pelvic wall and/or hydronephrosis). The primary objective was survival benefit.

Searching method:

The data source included the USA national library of medicine, Medline search, and the National Cancer Institute PDQ Clinical Protocols. Inclusion criteria for consideration in the current systemic review included studies published between January 1997 and December 2012, histology included squamous cell carcinoma, adenosquamous, and/or adenocarcinoma. Patients should be either chemotherapy naïve or cancer cervix chemotherapy naïve, and had performance state ≤ 2.

RESULTS:

Searching the above scientific websites had identified 49 publications, of them 19 were excluded as they didn’t fit the inclusion criteria of the current systematic review. 30 studies were identified eligible. Data were collected from 1760 patients enrolled in the current systematic review study. The mean age was 45.2 y.o. The mean tumor size was 4.7 cm. The most commonly used chemotherapies were cisplatin doublets. The mean chemotherapy cycles were 2.7 cycles. Patients underwent surgery after chemotherapy by mean time of 2.5 weeks. The standard operation was radical hysterectomy, pelvic lymphadenectomy. Chemotherapy achieved an objective response rate of 84%. The 5 year PFS, OS were 61.9%, 72.8% respectively. Treatment protocol was associated with mild early toxicity profile. Leucopenia and neutropenia were the commonest encountered side effects. Late toxicities were generally mild. They were mainly bladder dysfunction, and vaginal dehiscence.

The current study assessed quality of the included studies using Newcastle- Ottawa quality assessment scale.

CONCLUSION:

Neoadjuvant chemotherapy achieved comparable survival results to CCRT, and was associated with less toxicity.