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Short Communication

Pelvic Lymphadenectomy-an Essential Part of Surgical Treatment of Cervical Cancer - @

Sabera Khatun*

Department of Obstetrics and Gynaecology, Bangabandhu Sheikh Mujib Medical University (BSMMU), Shahbagh, Dhaka, Bangladesh

*Address for Correspondence: Sabera Khatun, Department of Obstetrics and Gynaecology, Bangabandhu Sheikh Mujib Medical University (BSMMU), Shahbagh, Dhaka, Bangladesh, Tel: + 008801819216254; E-mail: sabera120khatun12@yahoo.com

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In Bangladesh, the incidence of cervical cancer is about 13,000 and around 6600 women dies from cervical cancer each year [1]. Cervical cancer constitutes 22-29% of the female cancer in Bangladesh [2,3]. Diagnosis and treatment of CIN through population-based screening programs has lead to 50-80% reduction in deaths from cervical cancer in various developed countries [4].

Cervical cancer is a slowly progressing tumour and its natural history is reasonably well understood. The cancer starts as a preinvasive form, known as Cervical Intraepithelial Neoplasia (CIN). It is graded as CIN I, II and III. Only 2-3% of CIN I and 33-34% of CIN II and III progress to invasive cancer. This total process may take 10 to 15 years. If, during this slow progression period, CIN can be diagnosed and treated, development of invasive cervical cancer can be prevented. It is now widely accepted that detection and treatment of CIN can reduce the incidence of cervical cancer by population-based organized cervical cancer screening program and there is significant reduction in the incidence of cervical cancer in screened population in developed countries.

Invasive cervical cancer starts from stage IA_1 , through to stage IV B. All the stages are- IA_1 , IA_2 , IB_1 , IB_2 IIA_1 , IIA_2 , IIB, IIIA, IIIB, IVA and IVB. Surgical treatment can only be implemented up to stage IIA_2 . But only stage IB_1 and IIA_1 are universally treated by radical hysterectomy and Bilateral Pelvic Lymphadenectomy (BLPND).

There are five types of hysterectomies which can be applied for the treatment of cervical cancer.

Type I or extrafascial hysterectomy done for stage IA, disease.

Type II or modified radical hysterectomy or Wertheim's hysterectomy done for stage IA_2 disease.

Type III or radical hysterectomy done for stage IB_1 and stage IIA_1 disease.

Type IV or extended radical hysterectomy done for selective small central recurrence after radiotherapy.

Type V or pelvic exenteration done for central recurrences with involvement of the lower most part of the ureter and the bladder.

First three types of hysterectomies are always associated with bilateral pelvic lymph node dissection because pelvic lymph nodes are the commonest and first site of metastasis from cervical cancer. The rate of involvement of the pelvic lymph nodes in different stages is as follows:

Stage IA ₁	-	0.5%
Stage IA_2	-	5-13%
Stage IB ₁₋₂	-	17.3%
Stage IIA-	В –	30%
Stage IIIA	-B –	45%
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In Bangladesh, it is the most common gynaecological cancer and the most important cause of cancer related death in female. Here, 70% patients of cervical cancer come for treatment in inoperable stage. Only 30% can be treated by primary surgery. Bilateral pelvic lymphadenectomy is an essential part of primary radical surgery for cervical cancer. The status of the regional lymph nodes is one of the most important prognostic factor for cervical cancer [5-7]. The benefits of lymphadenectomy may extend beyond merely detecting metastatic disease. Survival benefit has also been noted among node negative patients who undergo more extensive lymphadenectomy [8-16]. To date, relatively little data exist to describe the possible benefits of a more extensive lymphadenectomy for early stage cervical cancer. Study of histopathological reports of the specimen of radical hysterectomy and Bilateral Pelvic Lymphadenectomy (BLPND) can contribute a lot to take the decision for adjuvant therapy for operable cases.

In Bangabandhu Sheikh Mujib Medical University (BSMMU) of Dhaka, Bangladesh, a retrospective analysis of histopathological reports of lymph nodes removed of 105 cases was done. Among them, 20 patients had lymph nodes positive for malignancy. Among all the factors, only age of the patients were found to be positively related with lymph node metastasis (p value < 0.001). Other factors like histological type of tumour, number of nodes removed stage and parity of the patients were not positively related with lymph node metastasis.

In conclusion, our findings suggest that the extent of lymphadenectomy performed for patients with early stage cervical cancer influence the outcome. Best results are observed in node negative patients, provided the greater number of nodes removed. Further work is required to determine the survival advantage with the number of nodes removed.

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