Management of histologically confirmed cervical cancer

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1. Scope and background

The purpose of this guideline is to describe the management of histologically proven cervical cancer and provide currently available best evidence to health care professionals to provide optimal care for these patients. This guideline also reviews their management options depending on the resources available in the local setting.

Ultimate goal of treating a cancer patient is to cure the disease where possible and to have control of primary disease and delay the recurrences in patients in whom complete cure is not possible. Patients beyond above levels should receive appropriate symptom relieving treatment. Pre-operative staging, individualized treatment planning and appropriate adjuvant treatment and risk based follow up are corner stones in managing these patients.

2. Summary of key recommendations

2.1 Patient assessment:

All patients should undergo speculum and per vaginal examination.

All the patients beyond FIGO stage IA1 should undergo examination under anesthesia before planning curative surgery.

This should be performed by a senior clinician (Consultant, Senior Registrar) with prior experience in cervical cancer clinical staging

As a minimum, chest X ray and ultrasound of the abdomen (when a cross sectional imaging is not available) should be performed in all patients to assess for distant solid organ involvement and renal tract obstruction.

MRI is the gold standard imaging to assess local tissues when available without delay, CECT (Contrast Enhanced Computerized Tomography) scan of the chest, abdomen and pelvis should be considered in every patient before radical treatment

Full blood count, renal functions, liver functions etc should be performed to assess the fitness for surgery.

All the patients who are diagnosed to have cervical cancers are better to be discussed in a multi-disciplinary setting before the surgical/ medical intervention – if the facilities are available.

2.2 Treatment of Stage IA1 disease

Post cervical cone biopsy/LLETZ biopsy or a hysterectomy specimen histology with stage IA1 cervical cancer should be assessed by a Consultant Gynaecologist or Gynaecological Oncologist.

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When planning treatment, patient's fertility wishes and prognostic histological features should be accounted.

LVSI is a well-recognized risk factor for lymphatic metastasis, it should be considered for further necessity of surgery.

When cervical cone excision is done, specimen should be not fragmented and correctly oriented with a mark (Eg: Stitch). Repeat cone excision is required if the cancer is < 3mm away from the resection margins or margins are difficult to assess.

Involved resection margin would upgrade the disease to IB1 and patient would require radical surgery.

2.3 Treatment of Stage IA2 disease

Post cervical cone biopsy/LLETZ biopsy or a hysterectomy specimen histology with stage IA2 cervical cancer should be assessed by a Consultant Gynaecologist or Gynaecological Oncologist.

2.3a Post cone biopsy/ loop excision – Stage 1A2

Simple open hysterectomy + bilateral salpingectomy with bilateral pelvic lymphadenectomy is recommended in patients with low-risk histology features (Grade 1/2, Negative LVSI).

For high risk IA2 disease (Grade 3, Positive LVSI), open radical hysterectomy with bilateral salpingectomy + bilateral pelvic lymphadenectomy is preferred. Risk of ovarian metastasis is low in this group (including adenocarcinoma of the cervix) and decision for oophorectomy should be individualized according to risk factors and patient wishes.

Piver-Rutledge type ll/ Querleu-Morrow type B hysterectomy is preferred for stage IA2 disease.

Minimal access surgery is contraindicated in these patients.

Radical trachelectomy or simple trachelectomy can be done if fertility preservation is considered.

2.3b Post hysterectomy

If stage IA2 disease is diagnosed in a post hysterectomy specimen, bilateral pelvic lymphadenectomy should be performed.

2.4 Stage IB1, IB2 disease

Standard treatment for IB1 and IB2 disease is open radical hysterectomy with bilateral salpingectomy + bilateral pelvic lymphadenectomy.

Piver-Rutledge type III / Querleu-Morrow type C1 radical hysterectomy is recommended in this group.

Lymph nodes should be removed from following regions (applies for IA1 with LVSI, IA2, IB, IIA1).

External iliac lymph nodes: Nodes from the bifurcation of common iliac artery to the deep circumflex iliac vein.

Internal iliac lymph nodes: Nodes around the internal iliac vessels.

Obturator lymph nodes: Nodes from the obturator fossa down to the level of the obturator nerve.

2.4a Fertility sparing treatment for Stage IB disease

Abdominal or vaginal radical trachelectomy with bilateral pelvic lymphadenectomy can be considered when maximum tumour diameter is < 20mm and not involving the uterine corpus.

All patients should undergo MRI scan of the pelvis and PET CT scan to assess suitability for fertility sparing surgery.

These patients require inputs from Gynaecological Oncologist, clinical oncology and reproductive medicine specialists before planning surgery.

2.5 Primary radio therapy in stage IA and IB disease:

Primary radical chemo radiotherapy should be reserved for patients who are not fit enough for surgery.

2.6 Stage IB3, IIA disease

Primary radiotherapy is preferred in this group.

If primary surgery is offered, it should be done only after case-based risk assessment (tumour grade, LVSI, size of tumour, length of vaginal involvement, anticipated technical difficulties).

2.7 Above procedures should be performed in a setting with adequate facilities, staff and surgical expertise.

In absence of facilities and expertise, these patients should be referred to a center with such facilities. Surgery should be done by a Consultant Gynaecologcial Oncologist or a Gynaecologist with experience in performing radical hysterectomy.

2.8 Stage IIB and above

These patients should be referred to a clinical oncologist for further management.

2.9 Post-operative radiotherapy

Every patient who had surgery for cervical cancer should have the post operative out patient review by the consultant.

High risk and intermediate risk category patients should be referred for adjuvant treatment.

2.10 Follow up after primary treatment

A follow up based on appropriate history and examination is recommended.

Re-malignant HPV infection.

Follow up frequency should be dictated by risk of recurrence of the cancer.

2.11 Recurrent cervical cancer

Suspected patients with recurrent disease should be referred to a gynaecological cancer centre.

Inputs from the clinical oncologist and radiologist is required before planning treatment in all patients.

All patients should receive clinical pelvic assessment by an experienced Gynaecologist/Gynaecological Oncologist and histological confirmation when lesion is accessible for biopsy.

CE CT scan of the chest, abdomen and pelvis should be performed to exclude distant recurrence.

MRI is the best investigation to assess the local tumor extent, especially in relation to pelvic side wall.

An examination under anaesthesia should be performed in patients with central disease.

Recurrence within short period of primary treatment or multi focal disease is not suitable for radical surgery or radiotherapy. Surgery, radiotherapy or chemo-therapy should be given only in palliative intent.

Single recurrent lesion who had no previous radical radiotherapy in a medically fit patient with a prolonged disease free interval can be managed by radical radiotherapy. Need for surgical debulking should be individually assessed in case-based manner.

Central, isolated pelvic recurrence who had radio-therapy with prolonged disease-free interval can be radically excised by pelvic exenteration or radical hysterectomy (depending on exact site of recurrence) as these patients are not suitable for further radio therapy.

CT scan or Positron Emission Tomography (PET) scan to exclude any distance metastasis should be done in all patients before selecting for exenterative procedures.

3. Introduction

Cervical cancer is the commonest gynaecological malignancy in Sri Lanka and developing world[1,2]. Screening for pre-malignant disease has shown great success worldwide, especially in the developed countries. While radical surgery or radical radiotherapy can achieve high levels of cure, it is vital to avoid dual modality radical treatment to minimize complications. This guideline discusses the management of biopsy proven cervical cancer.

4. Recommendations and discussion

4.1 Patient assessment

All patients should undergo speculum and per vaginal examination.

All the patients beyond FIGO stage IA1 should undergo examination under anaesthesia before planning curative surgery.

This should be performed by a senior clinician (consultant, senior registrar) with prior experience in cervical cancer clinical staging

As a minimum, chest X ray and ultrasound of the abdomen (when a cross sectional imaging is not available) should be performed in all patients to assess for distant solid organ involvement and renal tract obstruction.

MRI is the gold standard imaging to assess local tissues when available without delay, CECT (Contrast Enhanced Computerized Tomography) scan of the chest, abdomen and pelvis should be considered in every patient before radical treatment.

Full blood count, renal functions, liver functions etc should be performed to assess the fitness for surgery.

All the patients who are diagnosed to have cervical cancers are better to be discussed in a multi-disciplinary setting before the surgical/ medical intervention if the facilities are available.

Aim of this evaluation is to clinically stage the patient to assess suitability for curative surgery. This should include combined recto vaginal examination +/- cystoscopy / rigid sigmoidoscopy in presence of clinical features suggestive of bladder and rectal involvement.

In instance where a stage beyond IIA is evident on vaginal assessment, examination under anaesthesia can be exempted if a histology report is available.

If available without delay, an MRI scan can provide more details about parametrial involvement, size of the tumor and pelvic lymph node enlargement. MRI is considered as the best mode of assessment for local invasion in tumours larger than 10 mm[3,4] and it has an important role in selecting patients for fertility sparing radial surgery (trachelectomy).

CECT (Contrast Enhanced Computerized Tomography) scan of the chest, abdomen and pelvis can give more details about solid organ involvement, ureteric obstruction as well as pelvic and para-aortic lymph node enlargement. It should be mentioned that, with availability of pre-operative medical imaging, in 2018 FIGO made provisions for inclusion of pelvic and para-aortic lymph node metastasis in cervical cancer staging.

4.2 Treatment of Stage IA1 disease

Post cervical cone biopsy/LLETZ biopsy or a hysterectomy specimen histology with stage IA1cervical cancer should be assessed by a Consultant Gynaecologist or Gynaecological Oncologist.

When planning treatment, patient's fertility wishes and prognostic histological features should be accounted.

LVSI is a well-recognized risk factor for lymphatic metastasis, it should be considered for further necessity of surgery

When cervical cone excision is done, specimen should be not fragmented and correctly oriented with a mark. (E.g.: Stitch). Repeat cone excision is required if the cancer is < 3mm away from the resection margins or margins are difficult to assess[5].

Involved resection margin would upgrade the disease to IB1 and patient would require radical surgery.

Stage 1A1 disease is almost always diagnosed on a post cervical cone biopsy/LLETZ biopsy or a hysterectomy specimen. Depending on the margin status and lympho-vascular space invasion (LVSI), some patients would require further interventions as stated in the table below. LVSI is a well-recognized risk factor for lymphatic metastasis.

	With fertility wishes	Without fertility wishes
Without LVSI	Cervical cone excisions/ LLETZ	Simple extrafascial hysterectomy (Piver-Rutledge type 1/ Querleu-Morrow type ahysterectomy) and bilateral salpingectomy*
With LVSI	Cervical cone excisions/ LLETZ And Bilateral pelvic lymphadenectomy	Simple extra fascial open hysterectomy with bilateral salpingectomy* And Bilateral pelvic lymphadenectomy

*Need for oophorectomy should be individualized. There is no place for routine oophorectomy in early cervical cancer, even for adenocarcinoma variant.

4.3 Treatment of Stage IA2 disease

Post cervical cone biopsy/LLETZ biopsy or a hysterectomy specimen histology with stage IA2 cervical cancer should be assessed by a Consultant Gynaecologist or Gynaecological Oncologist.

Similar to IA1 disease, Stage IA2 is almost always diagnosed on a cervical cone biopsy/LLETZ biopsy or a hysterectomy specimen. However due to higher risk of metastatic disease and recurrence, more radical approach is recommended.

4.3a Post cone biopsy/ loop excision – stage 1A2

Simple open hysterectomy + bilateral salpingectomy with bilateral pelvic lymphadenectomy is recommended in patients with low risk histology features (Grade 1/2, Negative LVSI).

For high risk IA2 disease (Grade 3, Positive LVSI), open radical hysterectomy with bilateral salpingectomy + bilateral pelvic lymphadenectomy is preferred. Risk of ovarian metastasis is low in this group[6] (including adenocarcinoma of the cervix) and decision for oophorectomy should be individualized according to risk factors and patient wishes.

Piver-Rutledge type ll/ Querleu-Morrow type B2 hysterectomy is preferred for stage IA2 disease.

Minimal access surgery is contraindicated in these patients.

Radical trachelectomy or simple trachelectomy can be done if fertility preservation is considered.

Both Piver-Rutledge type ll/ Querleu-Morrow type B and Piver-Rutledge type III/ Querleu-Morrow type C1 radical hysterectomy are associated with similar oncological outcomes in this group. Therefore less invasive Piver-Rutledge type ll/ Querleu-Morrow type B2 hysterectomy is preferred for stage IA2 disease[7].

Pelvic lymphadenectomy is recommended for all the patients due to 5% to 10% risk of lymphatic metastasis[8].

Minimal access surgery should **not be** performed in these patients due to 4-fold increase of deaths when compared to open route[9].

Fertility sparing treatment – Abdominal or vaginal radical trachelectomy with bilateral pelvic lymphadenectomy can be done where fertility preservation is wished. Simple trachelectomy can be considered in patients with low-risk histology features (Grade 1/2, Negative LVSI). However, this decision should be individualized.

Refer to next section for more details on trachelectomy.

4.3b Post hysterectomy

If stage IA2 disease is diagnosed in a post hysterectomy specimen, bilateral pelvic lymphadenectomy should be performed.

4.4 Stage IB1, IB2 disease

Standard treatment for IB1 and IB2 disease is open radical hysterectomy with bilateral salpingectomy + bilateral pelvic lymphadenectomy.

Piver-Rutledge type III /Querleu-Morrow type C1 radical hysterectomy is recommended in this group.

Lymph nodes should be removed from following regions (applies for IA1 with LVSI, IA2, IB, IIA1).

External iliac lymph nodes: Nodes from the bifurcation of common iliac artery to the deep circumflex iliac vein.

Internal iliac lymph nodes: Nodes around the internal iliac vessels.

Obturator lymph nodes: Nodes from the obturator fossa down to the level of the obturator nerve.

Risk of ovarian metastasis in Stage IB adenocarcinoma is around 4%[10]. Therefore patients preference and risk factors for ovarian cancer should be considered when planning bilateral oophorectomy in pre-menopausal women. When performing radical hysterectomy, autonomic nerve sparing would reduce long term complications. Refer the appendix for technical details of radical hysterectomy classification.

4.4a Fertility sparing treatment for Stage IB disease

Abdominal or vaginal radical trachelectomy with bilateral pelvic lymphadenectomy can be considered when maximum tumour diameter is < 20mm and not involving the uterine corpus[11].

All patients should undergo MRI scan of the pelvis and PET CT scan to assess suitability for fertility sparing surgery.

These patients require inputs from gynaecological oncologist, clinical oncology and reproductive medicine specialists before planning surgery.

Risk of recurrence in this group is around 5% and radical tachylectomy would have similar oncological outcome to a radical hysterectomy. However, MRI scan and PET scan should be done to select patients suitable for this conservative surgery. Live birth rate after radical trachelectomy is around 25% to 50%[5].

4.5 Primary radio therapy in stage IA and IB disease:

Primary radical chemo radiotherapy should be reserved for patients who are not fit enough for surgery.

Primary radical chemo radiotherapy is associated with similar survival outcomes compared to radical surgery. However radical radiotherapy is associated with more long-term complications compared to radical surgery (sexual dysfunction, bladder symptoms, bowel symptoms, chronic pelvic pain, premature menopause, lymph oedema). Therefore, radical surgery is preferred over radical chemo radiotherapy in this group.

4.6 Stage IB3, IIA disease

Primary radiotherapy is preferred in this group.

If primary surgery is offered, it should be done only after case-based risk assessment. (tumour grade, LVSI, size of tumour, length of vaginal involvement, anticipated technical difficulties).

Stage IB3 and IIA are associated with higher incidences of lymph node involvement, positive surgical resection margins, parametrium involvement and cancer recurrence. Therefore, primary radiotherapy is preferred in this group[12,13]. Place of neo adjuvant chemotherapy in this category is still under investigation.

4.7. Above procedures should be performed in a setting with adequate facilities, staff and surgical expertise. In absence of facilities and expertise, these patients should be referred to a center with such facilities. Surgery should be done by a Consultant Gynaecologcial Oncologist or a Gynaecologist with experience in performing radical hysterectomy.

4.8 Stage IIB and above

These patients should be referred to a clinical oncologist for further management.

Mode of treatment is either chemo radiotherapy or chemo therapy.

4.9 Post-operative radiotherapy

Every patient who had surgery for cervical cancer should have the post-operative outpatient review by the consultant.

High risk and intermediate risk category patients should be referred for adjuvant treatment.

There are 2 risk groups in which post-operative radiotherapy is indicated[14].

1. High risk – positive or close (less than 5mm) surgical margins[15] or lymph node metastases or parametrial spread.
2. Intermediate risk – any 2 out of 3 factors (LVSI, tumour > 4 cm, deep stromal invasion). Sedlis criteria can be used for finer characterization of the risk factors.

Sedlis criteria for radiotherapy[5]

LVSI	Depth of stromal invasion	Tumour size
+	Deep 1/3	Any
+	Middle 1/3	2 cm or more
+	Superficial 1/3	5 cm or more
-	Middle or Deep 1/3	4 cm or more

These patients should be referred to a clinical oncologist for adjuvant treatment. Adjuvant treatment is usually consist of External Beam Radio Therapy (EBRT) +/- brachytherapy +/- chemotherapy.

4.10. Follow up after primary treatment

A follow up based on appropriate history and examination is recommended.

Follow up frequency should be dictated by risk of recurrence of the cancer.

History: Ask for vaginal bleeding or discharge, new onset persistent lower limb swelling, recent change of bladder/bowel habits.

Examination: All patients should have abdominal examination, including inguinal area for lymphadenopathy with speculum and per vaginal examination.

Investigation: It is a good practice to perform ultrasound scan of the abdomen/pelvis to detect cancer recurrence. Serum creatinine should be considered in patients who had radiotherapy to detect post irradiation ureteric strictures.

Follow up interval – risk based follow up is recommended

Low risk of recurrence	Primary surgical treatment only	3-4 monthly clinical assessment for first 2 years. Vault smears at 6 and 18 months should be done to detect persistent pre malignant HPV infection. Further vault smears could be done at the discretion of the clinician to detect new onset pre malignant HPV infections. 6 monthly follow up for next 3 years (total 5 years).
High risk of recurrence	Radiotherapy +/- surgery	3 to 4 monthly clinical assessment for first 2 years. Routine vault smear should not be done in patients who had radiotherapy (High false-positive rate). 6 monthly follow up for another 3 years. Annual assessment thereafter.
Fertility sparing surgery		3-4 monthly clinical assessment for first 2 years. 6 monthly follow up for next 3 years. Annual assessment thereafter until completion surgery. Smear testing at 6 months and 12 months. Annual smear for next 9 years. Patient should return to normal population screening thereafter. MRI of the abdomen and pelvis should be considered at 6 months and 12 months. Routine cervical screening thereafter until completion surgery.

Follow up setting – Follow up can be conducted in a gynaecological oncology centre or general gynaecology unit. Follow up should be done by an experienced clinician (Registrar or above level).

4.11 Recurrent cervical cancer

Suspected patients with recurrent disease should be referred to a gynaecological cancer centre.

Inputs from the clinical oncologist and radiologist is required before planning treatment in all patients.

All patients should receive clinical pelvic assessment by an experienced Gynaecologist/Gynaecological Oncologist and histological confirmation when lesion is accessible for biopsy.

CE CT scan of the chest, abdomen and pelvis should be performed to exclude distant recurrence.

MRI is the best investigation to assess the local tumor extent, especially in relation to pelvic side wall.

An examination under anaesthesia should be performed in patients with central disease.

Recurrence within short period of primary treatment or multi focal disease is not suitable for radical surgery or radiotherapy. Surgery, radiotherapy or chemotherapy should be given only in palliative intent.

Single recurrent lesion who had no previous radical radiotherapy in a medically fit patient with a prolonged disease free interval can be managed by radical radiotherapy. Need for surgical debulking should be individually assessed in case-based manner.

Patients with central, isolated pelvic recurrence who had previous radiotherapy with prolonged disease-free interval can be radically excised by pelvic exenteration or radical hysterectomy (depending on exact site of recurrence) as these patients are not suitable for further radio therapy.

CT scan or Positron Emission Tomography (PET) scan to exclude any distance metastasis should be done in all patients before selecting for exonerative procedures.

Behavior of cervical cancer is more complex in the recurrent disease compared to primary. Therefore inputs from the oncologist and radiologist is required before planning treatment in these patients. Remission period from the primary treatment, anatomical distribution of the disease, previous radio therapy as well as physical fitness/performance status are important variables to consider when managing these patients.

Recurrence within 1 year of the primary treatment and multi-focal disease are considered as features of poor prognosis. Previous radical irradiation of the pelvis is associated with cellular changes that prevents the possibility of re-irradiation due to extremely high incidence of organ toxicity (urinary fistula, faecal fistula, skin ulceration, bowel stricture formation, ureteric stricture formation etc).

Therefore, pelvic exenteration is the only curative option for resectable recurrent disease in patients who had previous radical radio therapy.

5. Clinical governance

Patient presenting with post coital bleeding or any other symptom suggestive of cervical cancer should be referred to a specialist gynaecological service within 14 days.

The definitive treatment of a histologically confirmed case of cervical cancer, should be aimed to occur within 6 weeks from the date of biopsy. Patients should be promptly referred to specialist centers to achieve this target.

Above time frames are guidance to ensure patient safety and not to be considered as strict rules. Clinical audits on these time frames are highly recommended.

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Appendix

Table 1. FIGO staging 2018

I	The carcinoma is strictly confined to the cervix (extension to the uterine corpus should be disregarded)
IA	Invasive carcinoma that can be diagnosed only by microscopy, with maximum depth of invasion
IA1	Measured stromal invasion < 3 mm in depth
IA2	Measured stromal invasion 3 mm to 5 mm in depth
IB	Invasive carcinoma with measured deepest invasion ≥5 mm (greater than Stage IA), lesion limited to the cervix uteri
IB1	Invasive carcinoma ≥5 mm depth of stromal invasion, and < 2 cm in greatest dimension
IB2	Invasive carcinoma ≥2 cm and < 4 cm in greatest dimension
IB3	Invasive carcinoma ≥4 cm in greatest dimension
II	The carcinoma invades beyond the uterus, but has not extended onto the lower third of the vagina or to the pelvic wall
IIA	Involvement limited to the upper two-thirds of the vagina without parametrial involvement
IIA1	Invasive carcinoma < 4cm in greatest dimension
IIA2	Invasive carcinoma ≥4 cm in greatest dimension
IIB	With parametrial involvement but not up to the pelvic wall
III	The carcinoma involves the lower third of the vagina and/or extends to the pelvic wall and/or causes hydronephrosis or nonfunctioning kidney and/or involves pelvic and/or para-aortic lymph nodes
IIIA	The carcinoma involves the lower third of the vagina, with no extension to the pelvic wall
IIIB	Extension to the pelvic wall and/or hydronephrosis or nonfunctioning kidney (unless known to be due to another cause)
IIIC	Involvement of pelvic and/or para-aortic lymph nodes, irrespective of tumor size and extent
IV	The carcinoma has extended beyond the true pelvis or has involved (biopsy proven) the mucosa of the bladder or rectum. (A bullous edema, as such, does not permit a case to be allotted to Stage IV)
IVA	Tumor invasion of bladder and/or bowel mucosa
IVB	Distant metastasis, including intra-abdominal metastases and/or inguinal nodes

Table 2. Classification of radical hysterectomy

Piver-Rutledge Classification (1974)		Querleu and Morrow Classification (2008)	
Class 1	Simple extra fascial hysterectomy. No dissection of ureter. Uterine arteries and cardinal ligaments are resected close to the uterus. Vagina not excised.	**Type A**	Simple extra fascial hysterectomy. No dissection of ureter. Uterine arteries and cardinal ligaments are resected close to the uterus. Excision of vagina less than 10mm
Class 2	Ureter – Para cervical ureteric dissection. Partial resection of the vesicouterine ligament Uterine artery – Dissected just medial to ureter Cardinal ligaments – Up to medial half Utero sacral ligament – Midway from sacral insertion Vagina – Removal of upper third Routine pelvic lymphadenectomy	**Type B2**	Ureter – Para cervical ureteric dissection. Partial resection of the vesicouterine ligament Uterine artery – Dissected just medial to ureter Cardinal ligaments – Resection at ureteric tunnel level Utero sacral ligament – Midway from sacral insertion Vagina – Removal of upper third Routine pelvic lymphadenectomy
		Type B1	Type B2 without pelvic lymphadenectomy **(Not recommended)**

Class 3	Ureter – Para cervical ureteric dissection. Complete resection of vesicouterine ligament Uterine artery – Divided at the origin from internal iliac artery Cardinal ligaments – At the lateral pelvic wall Utero sacral ligament – Close to the sacral insertion Vagina – Removal of upper half Routine pelvic lymphadenectomy

Type C1	Ureter – Fully mobilized. Resection of the vesicouterine ligament at the level of bladder Uterine artery – Divided at the origin from internal iliac artery Cardinal ligaments – At the lateral pelvic wall Utero sacral ligament – At the level of the rectum Vagina – at least 15 - 20 mm is removed Routine pelvic lymphadenectomy Preservation of the pelvic autonomic nerves
Type C2	Type C1 without preservation of the pelvic autonomic nerves **(Not recommended)**