

## XXI. Diseases of the Female Genital System

### ***N.B.2:***

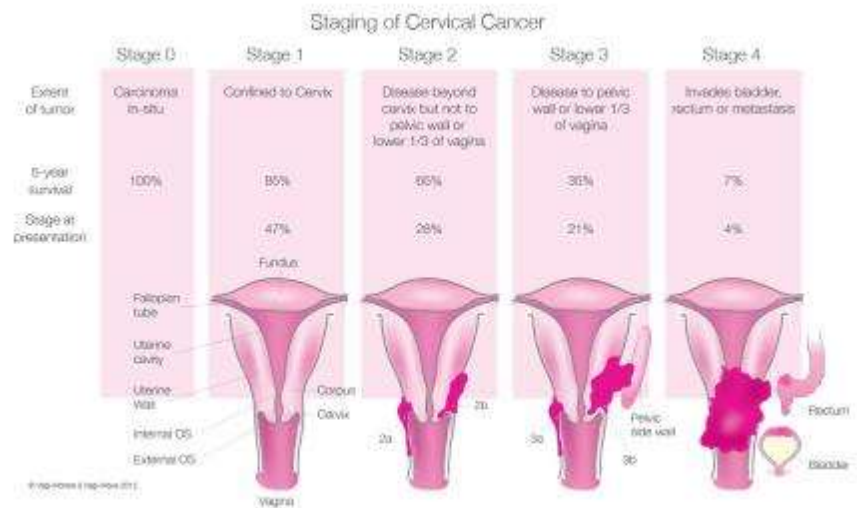
#### **Spread of carcinoma of the cervix**

1. Permeation and direct continuity to:
  - (a) Bladder and ureter → obstruction → hydronephrosis.
  - (b) Rectum or/and vagina.
2. Lymphatic vessels to regional lymph nodes and adjacent tissues.
3. Blood vessels (late).

#### **Staging of carcinoma of cervix:**

Stage	Description
0	Tumor confined to the surface layer (the cell lining) of the cervix; also called carcinoma in situ
I	Extension deeper into the cervix with no spread beyond (extension to the corpus is disregarded)
IA	Invasive carcinoma; may only be diagnosed at microscopy
IA1	Stromal invasion 3.0 mm deep and extension 7.0 mm
IA2	Stromal invasion >3.0 mm and 5.0 mm with extension ≤7.0 mm
IB	Clinically visible lesions limited to the cervix uteri or preclinical cancers higher than stage IA
IB1	Clinically visible lesion 4.0 cm in greatest dimension
IB2	Clinically visible lesion >4.0 cm in greatest dimension
II	Cervical carcinoma extends beyond the uterus but not to the pelvic wall or the lower one-third of the vagina
IIA	No parametrial invasion
IIA1	Clinically visible lesion 4.0 cm in greatest dimension
IIA2	Clinically visible lesion >4.0 cm in greatest dimension
IIB	With obvious parametrial invasion
III	Extension to the pelvic wall, involvement of lower one-third of the vagina, or hydronephrosis or nonfunctioning kidney
IIIA	Involvement of lower one-third of the vagina with no extension to the pelvic wall
IIIB	Extension to the pelvic wall, hydronephrosis, or nonfunctioning kidney
IV	Extension beyond the true pelvis or involvement of the bladder or rectal mucosa (biopsy proved); bullous edema does not convey stage IV disease
IVA	Spread to adjacent organs
IVB	Spread to distant organs

<b>Staging of carcinoma of cervix:</b>	
<b>Stage 0:</b>	Pre-invasive or "carcinoma in situ"; Malignancy is confined to mucosa; invasion is lacking.
<b>Stage I:</b>	Involvement of cervix only.
<b>Stage II:</b>	Involvement of cervix as well as fornices and upper part of vagina But not the pelvic wall.
<b>Stage III:</b>	Involvement of pelvic wall, lower part of vagina, body of uterus and pelvic lymph nodes.
<b>Stage IV:</b>	Spread to rectum and bladder; and, distant metastases by lymphatics and blood.



Carcinoma of the cervix is commoner than that of the body of uterus and in 90% of cases, it occurs in women who have born many children (**multiparous**).

### **Gross Types**

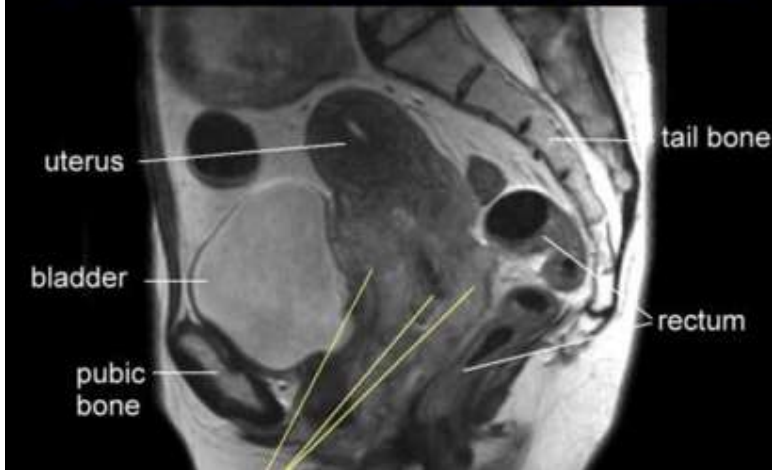
#### ***Papillary.***

- **Large fungating mass.**
- Projects into the cavity of vagina; &
- Appears in the lip of external os.
- Not so common.
- Of relatively-better prognosis
- Early diagnosis by haemorrhage during coitus.

#### ***Infiltrating.***

- **Small ulcerating mass.**
- Infiltrates quickly and deeply; and, appears in the internal os.
- Much more common.
- Of relatively worse prognosis.
- The cervix is hard and the mass blocks the cervical canal → necrosis + suppuration → accumulation of infected material → pyometra.
- No bleeding during coitus and hence late diagnosis.

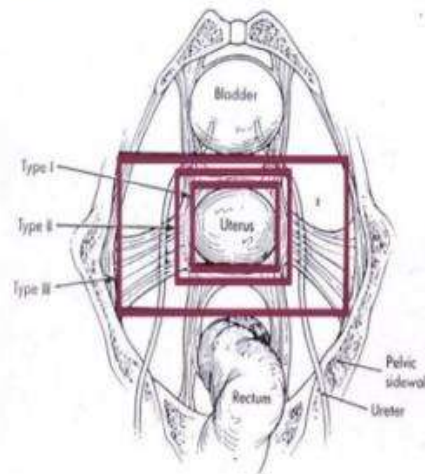
**MRI - advanced cervix cancer invading the bladder**



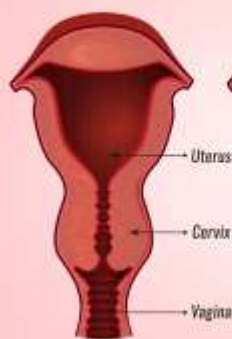
**TYPES OF HYSTERECTOMY**

GYNCOLOGICAL CANCER GROUP OF THE EUROPEAN ORGANIZATION FOR RESEARCH AND TREATMENT OF CANCER

- Extrafascial (Type I) hysterectomy or simple hysterectomy
- Modified Radical (type II) Hysterectomy
- Radical (type III) or Wertheim's or Meig's Hysterectomy
- Extended radical hysterectomy (Type IV)
- Partial exenteration (type V)



**Normal Cervix**



[cut-away view]

**Early stage IB Cervical cancer**



[cut-away view]

**Late stage IB Cervical cancer**



[cut-away view]

**Stage IIB The cancer is outside cervix**



[cut-away view]

## Cervical Cancer Stages

- After someone is diagnosed with cervical cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called **staging**.
- The stage of a cancer describes the extent of the cancer in the body. It helps determine how serious the cancer is and [how best to treat it](#).
- **The stage is one of the most important factors in deciding how to treat the cancer and determining how successful treatment might be.**

**To determine the cancer's stage after a cervical cancer diagnosis, doctors try to answer these questions:**

- How far has the cancer grown into the cervix?
- Has the cancer reached nearby structures?
- Has the cancer spread to the nearby lymph nodes or to distant organs?

Information from [exams and tests](#) is used to determine the size of the tumor,

how deeply the tumor has invaded tissues in and around the cervix, and its spread to distant places (metastasis).

### **The FIGO (International Federation of Gynecology and Obstetrics) staging system**

Is used most often for cancers of the female reproductive organs, including cervical cancer. For cervical cancer,

**the clinical stage is used and is based on**

- The results of the doctor's physical exam,
- Biopsies,
- Imaging tests, and a
- Few other tests that are done in some cases, such as cystoscopy and proctoscopy.

It is not based on what is found during surgery.

If surgery is done, **a pathologic stage can be determined** from the findings at surgery, but it does not change your clinical stage.

**Your treatment plan is based on the clinical stage.**

- Cervical cancer stage ranges from stages I (1) through IV (4).
- As a rule, the lower the number, the less the cancer has spread.
- A higher number, such as stage IV, means a more advanced cancer.
- And within a stage, an earlier letter means a lower stage.
- Cancers with similar stages tend to have a similar outlook and are often treated in much the same way.
- **Cervical cancer staging can be complex.**
- If you have any questions about your stage, please ask your doctor to explain it to you in a way you understand. (An explanation of the FIGO system is in the stage table below.)



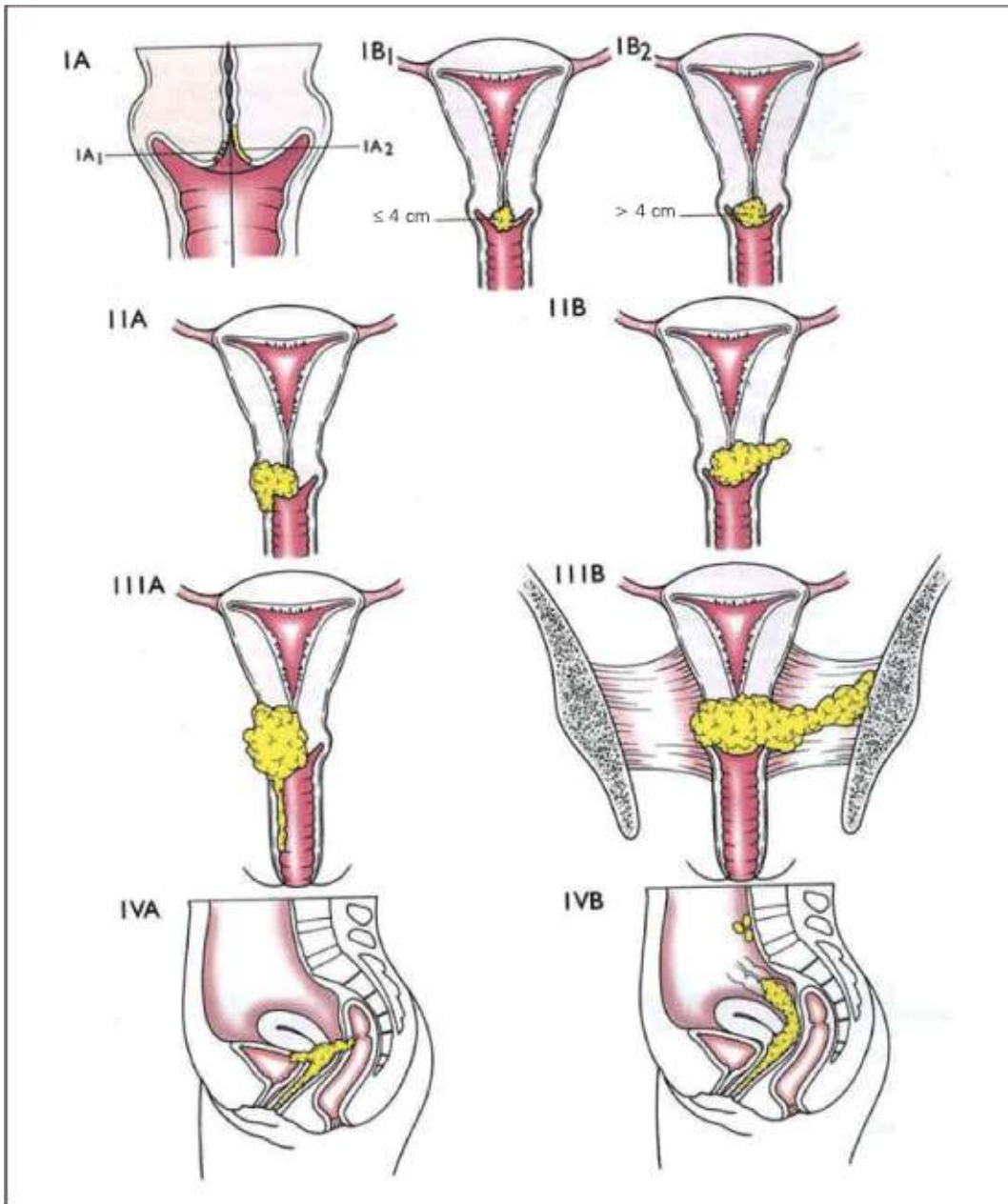
FIGO Stage		Stage description
<b>I</b>		<p>The cancer cells have grown from the surface of the cervix into deeper tissues of the cervix.</p> <p><i>Cancer has not spread to nearby lymph nodes.</i></p> <p><i>Cancer has not spread to distant sites.</i></p>
	<b>I-A</b>	<p>There is a very small amount of cancer, and</p> <p><i>It can be seen only under a microscope.</i></p>
	<b>I-A1</b>	<p>The area of cancer can only be seen with a microscope and is <b>less than 3 mm</b> (about 1/8-inch) deep.</p>
	<b>I-A2</b>	<p>The area of cancer can only be seen with a microscope and is <b>between 3 mm and 5 mm</b> (about 1/5-inch) deep.</p>
	<b>IB</b>	<p>This includes stage I cancer that has spread <b>deeper than 5 mm</b> (about 1/5 inch) but is still limited to the cervix.</p>
	<b>I-B1</b>	<p>The cancer is <b>deeper than 5 mm (about 1/5-inch) but not more than 2 cm (about 4/5-inch) in size. (5 mm to 2 cm)</b></p>
	<b>I-B2</b>	<p>The cancer is at least <b>2 cm in size but not larger than 4 cm.</b></p>
	<b>I-B3</b>	<p>The cancer is <b>at least 4 cm in size and limited to the cervix.</b></p>

II		<p>The cancer <b>has grown beyond the cervix and uterus,</b>  But hasn't spread to the walls of the pelvis or the lower part of the vagina.  <u><i>It has not spread to nearby lymph nodes.</i></u>  <u><i>It has not spread to distant sites.</i></u></p>
	II-A	<p>The cancer has grown beyond the cervix and uterus but has not spread into the tissues next to the cervix (called the parametria).</p>
	II-A1	<p>The cancer <b>is not larger than 4 cm</b> (about 1 3/5 inches).</p>
	II-A2	<p>The cancer <b>is 4 cm or larger.</b></p>
	II-B	<p>The cancer <b>has grown beyond the cervix and uterus and has spread into the tissues next to the cervix (the parametria).</b></p>
III		<p>The cancer has spread to the lower part of the vagina or the walls of the pelvis.  The cancer may be blocking the ureters (tubes that carry urine from the kidneys to the bladder).  <u><i>It might or might not have not spread to nearby lymph nodes.</i></u>  <u><i>It has not spread to distant sites.</i></u></p>
	III-A	<p>The cancer has spread <b>to the lower part of the vagina</b>  <u><b>But not the walls of the pelvis.</b></u></p>
	III-B	<p>The cancer has grown into the <b>walls of the pelvis and/or is blocking one or both ureters causing kidney problems (called hydronephrosis).</b></p>
	III-C	<p>The cancer <b>can be any size.</b>  Imaging tests or a biopsy show the cancer <b>has spread to Nearby pelvic lymph nodes (IIIC1) or Para-aortic lymph nodes (IIIC2).</b></p> <ul style="list-style-type: none"> <li>• <u><b>It has not spread to distant sites.</b></u></li> </ul>

<b>IV</b>		The cancer has grown into the <b>bladder or rectum or</b> Too far away organs like the <b>lungs or bones.</b>
	<b>IV-A</b>	The cancer has spread to the bladder or rectum or it is growing out of the pelvis.
	<b>IV-B</b>	The cancer has spread to <b>distant organs outside the pelvic area</b> , such as distant lymph nodes, lungs or bones.

Recommended Treatment Based on Clinical Stage	
Stages	Primary treatment
0	Cervical conization, LEEP, laser therapy, single hysterectomy
IA	Modified radical hysterectomy, intracavity radiation therapy for nonsurgical candidates
IB	Radical hysterectomy with bilateral pelvic lymphadenectomy or radiation therapy alone
IIA	Radical hysterectomy; radiation therapy
IIB	Chemoradiation, external beam radiation therapy
III	Radiation with chemotherapy
IVA	Radiation with chemotherapy
IVB	Chemotherapy or palliative radiation therapy

Abbreviation: LEEP, loop electrosurgical excision procedure.



**Figure 1.** Staging of uterine cervix carcinoma according to FIGO<sup>(3)</sup>.



# 10 WARNING SIGNS OF CERVICAL CANCER



Unusual vaginal discharge



Abnormal vaginal bleeding



Heavier & longer menstrual cycle



Discomfort while urinating



Loss of bladder control



Pain during intercourse



Constant fatigue



Pelvic pain



Unexplained weight loss



Leg pain

