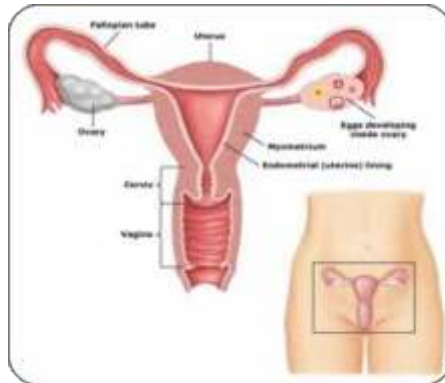


CERVICAL
CANCER



The internal genital organs of a female comprises of ovaries, uterine / fallopian tubes, single uterus & vagina. The lower cylindrical part of uterus is called cervix. This is the area of high epithelial activity, which is one of the reasons for the development of cancer in this region. In developing countries like India, this is the most common malignancy seen in women of age group 45 to 55 years. Whereas in developed countries, incidence and mortality due to cervical cancer has decreased significantly. This is attributed to the mass screening with papanicolaou test (pap smear test) which can diagnose the disease early.

The causative factors attributed to this disease are:-

1. Human papilloma virus infection / genital warts.
2. Multiple sexual partners.
3. Early age of first intercourse (< 16 years)
4. Poor hygiene, poor access to health care.
5. Multiple infections / sexually transmitted diseases.
6. Smoking etc.

When to suspect cervical cancer?

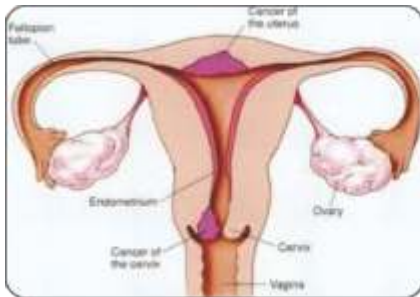
When a women complaints of one or more of the following symptoms:

1. Abnormal bleeding from the vagina (apart from normal menstrual cycle).
2. Unexpected inter menstrual bleeding/spotting.
3. Post menopausal bleeding.
4. Foul smelling discharge from cervix which does not respond to antibiotics
5. Unresolved lower abdomen pain or low backache.
6. If in late stages – urinary obstruction, painful urination, blood in urine etc...
7. Weakness, anemia.

CERVICAL CANCER

How to Diagnose?

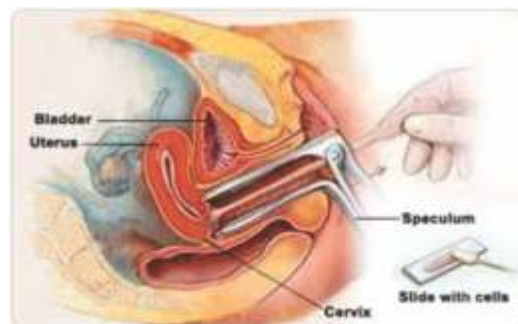
Early diagnosis play a key role in the management of cervical cancer. Detailed history & physical examination is a must to suspect or diagnose the disease. Physical examination includes per vaginal examination which tells the doctor about status of cervix, any growth in cervix or extension into surrounding pelvic organs. These things are useful for staging the disease.



Following are the modalities for screening, diagnosis as well as for staging the cervix cancer.

1 Pap smear:

Active screening with pap smear is a must to diagnose the disease in early stages. In pap smear, a speculum is introduced in vagina, applied to cervix & rotated 360° to abrade the surface slightly & to pick up the abnormal cells from cervical opening.



CERVICAL CANCER

When to do pap smear?

Pap smear is recommended in women within 2 years of onset of sexual activity or age more than 20 years, whichever is earlier, for 2 consecutive years & if normal once in every 3 years until the age of 65 years.

2. Biopsy:

- When a gross cervical lesion is present, punch biopsy is taken to confirm the diagnosis. Laboratory studies include routine blood investigations, renal function test, urine analysis etc.

3. Imaging studies to evaluate tumor include

- a. USG pelvis.
- b. Trans vaginal ultrasound.
- c. CT – Scan or MRI Scan of abdomen & pelvis
- d. PET – CT- Scan.

How is the prognosis of cervical cancer?

It is very important to stage the disease because treatment options and prognosis depend upon the stage of the disease. Other major prognostic factors are lymph node status, tumor volume, depth of invasion and to a lesser extent histologic type or grade. The five year survival rate according to stage of tumor are as follows-

Stage I	-	> 90%
Stage II	-	60% - 80%
Stage III	-	approximately 50%
Stage IV	-	< 30%

Treatment options

Cervical cancer requires multidisciplinary management.

In early stages (up to stage IIA), treatment options include either surgery or radiotherapy. Both the modalities are found to give equal results.

For locally advanced disease (IIB onwards) treatment includes a combination of radiotherapy along with chemotherapy.

CERVICAL CANCER