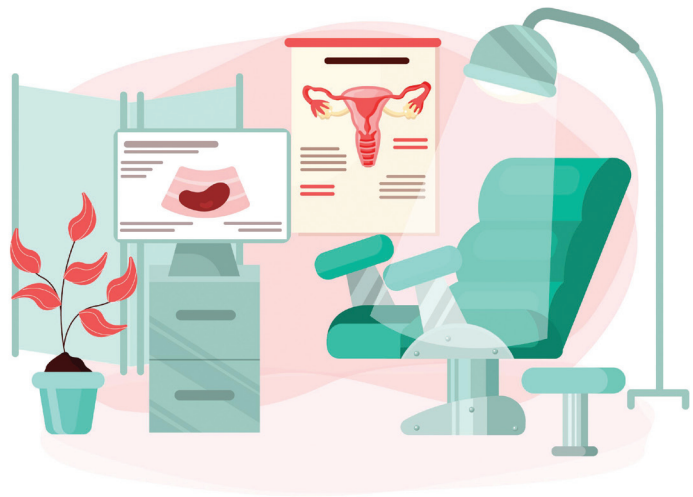


How is cervical cancer diagnosed?

Dr Sumayya Ebrahim explains how cervical cancer is diagnosed and what the staging means.



Cervical cancer is the most common cancer in women under the age of 40 in South Africa. Current estimates indicate that every year 10 702 women are diagnosed with cervical cancer. Roughly half these women will not survive the disease. The tragedy is that with the appropriate screening tests and human papillomavirus (HPV) vaccinations, this cancer is highly preventable.

WHAT HAPPENS WHEN A DOCTOR IS CONSULTED?

A careful history is taken. After this, an examination is performed. On examination, if the cancer is advanced, the doctor may feel a lump or growth on the cervix. Sometimes this growth can extend into the vagina and the tissues around the vagina, creating thickening and hardening of the tissues. With early cancers, sometimes these aren't visible to the naked eye and can only be detected on a Pap smear or biopsy of the cervix.

BIOPSY AND RESULTS

The main test needed to confirm a diagnosis is a biopsy. Your doctor may give you a local anaesthetic into the cervix and take a biopsy of the growth. If the growth isn't visible to the naked eye, a special microscope (colposcope) may be used to show up the abnormal area. A biopsy can then be done.

During a biopsy, a tiny piece of tissue is removed, usually a few millimeters in size. This is placed into a special solution and sent to the pathologist to be analysed in the laboratory. This process usually takes a few days to complete.

A biopsy result may show one of three main types of cervical cancer:

1. Squamous cell carcinoma

- 90% of cervical cancers.
- Develops from the ectocervix (the outer cervix closest to the vaginal area).

2. Adenocarcinoma

- Develops from the inner cervix from glandular cells.

3. Adenosquamous carcinoma

- A mixture of the two types above.

STAGING TESTS

Once cancer is diagnosed and before treatment can be planned, staging needs to be done. The stage will determine and guide decisions around treatment.

Staging is performed by clinical examination of the vagina and rectum. Special tests for staging are also required and will include the following:

- Chest X-ray and CT scan to look for spread to the lungs.
- Abdominal and pelvic ultrasound and CT abdomen and pelvis. These look for spread to the liver, adjacent organs like bladder, bowel and kidneys. These can also detect possible spread to lymph nodes.
- Blood tests for tumour markers like CA125, CEA and CA19-9. These are proteins detected in the blood that occur with cervical cancer and can be useful monitoring tools for treatment response or recurrence.

Optional tests in selected cases are:

- MRI scans to look for spread.
- PET scans are whole body scans that can detect early disease. This measures levels of metabolic or biochemical activity. Cancerous areas will have higher metabolic and biochemical activity.
- Lymph node biopsy.
- Cystoscopy of the bladder.
- Laparoscopy of the abdomen for special biopsies.

Cervical cancer is staged using the FIGO system (International Federation of Gynaecology and Obstetrics).

■ **Stage 1** – The cancer is limited to the cervix.

- Stage1A: Cancer is only visible with a microscope.
- Stage1A1: Cancer has grown 3mm or less into the cervix.
- Stage 1A2: Cancer has grown 3 – 5mm into the cervix.
- Stage1B: Still limited to the cervix but bigger.
- Stage1B1: Cancer is 2cm or less and has grown more than 5mm into the cervix.
- Stage1B2: Cancer is 2 – 4cm.
- Stage1B3: Cancer is 4cm.

■ **Stage 2** – The cancer has spread to the upper third of the vagina or tissue around the uterus.

- Stage 2A: Spread to the upper vagina but not to the tissue around the uterus.
- Stage 2B: Spread to the tissue around the uterus.

■ **Stage 3** – The cancer has reached the lower two-thirds of the vagina and/or the pelvic side walls. The tumour may be large enough to block the tubes that transport urine from the kidneys to the bladder (ureters).

- Stage3A: Spread to the lower two-thirds of vagina but not the pelvic side walls.
- Stage3B: Spread to the pelvic side walls and blocking one or both ureters.

■ **Stage 4** – The cancer has spread.

- Stage 4A: Spread to organs nearby like bladder or rectum.
- Stage4B: Spread to distant organs like lymph nodes, lung, liver, or bone. [x](#)



MEET THE EXPERT

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