

# WHAT IS A CONE BIOPSY?

**Gynaecologist, Dr Sumayya Ebrahim, details what a cone biopsy is and why this special cervical biopsy is needed.**

A biopsy of the cervix is advised generally when a Pap smear detects abnormal cells. Because a Pap smear is only a screening test, a biopsy gives more accurate information regarding the extent of the abnormality.

A cervical biopsy is usually done in conjunction with a colposcopy (using a microscope and special stains to examine the cervix). This information will then inform decisions about further treatment.

## TYPES OF CERVICAL BIOPSIES

**Punch biopsy** – This is usually done with a colposcopy. The instrument used to remove a sample of tissue is biopsy forceps. Multiple biopsies can be done on different areas of the cervix using this method.

**Endocervical biopsy** – A narrow instrument, called a curette, is used to scrape a sample from the part of the cervix called the endocervical canal.

**Cone biopsy** – This involves removing a more extensive part of the cervix. It's in the shape of a cone or triangular wedge as in the diagram to the right.

## WHEN IS A CONE BIOPSY NEEDED?

A cone biopsy can be done for diagnostic or therapeutic indications.

## DIAGNOSTIC

- When the Pap smear shows moderate to severe changes, but the abnormal area on the cervix can't be identified visually at colposcopy, or it extends higher up the cervical canal. In this instance, the cone biopsy is done to remove

and examine the abnormal tissue and so determine the full extent of the lesion.

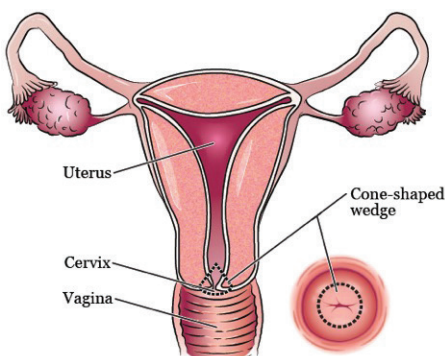
- When cervical cancer is suspected based on Pap smear test results, a colposcopy and cervical biopsy is needed. A cone biopsy can determine the extent, depth, and severity of the cancerous tissue and can guide treatment decisions.

## THERAPEUTIC

- If a Pap smear, colposcopy and biopsy all confirm a moderate to severe lesion then a cone biopsy is done to remove the abnormal area. If all the abnormal tissue is contained in the biopsy and the margins are free of disease, then treatment is complete. Future monitoring by Pap smears will be necessary.

## THE PROCEDURE

The cone biopsy is usually performed as a day procedure (an overnight stay is usually not necessary). Either a general anaesthetic or a regional anaesthetic, like a spinal or epidural, is the pain control method of choice.



The sample of tissue removed can be done with:

- A surgical scalpel blade, also called a cold-knife biopsy.
- Excision with an electrocautery device, called a loop electrosurgical procedure (LEEP).
- CO2 laser.

## THE RISKS

- A few patients will experience bleeding that may require further treatment.
- Cervical stenosis; this is when scar tissue develops that may affect future fertility or even dilation of the cervix in childbirth. This may require a caesarean section as a result.
- Cervical incompetence; this is the inability of the cervix to stay closed during pregnancy. Women who have had a cone biopsy may have an increased risk of miscarriage or preterm delivery. A special cervical suture, called a cerclage, may be necessary.

## SPECIAL CONSIDERATIONS

The healing and scar tissue that can result after a cone biopsy may make it difficult in future to identify abnormal tissue. This may become a challenge especially when continued monitoring is necessary. ♀

## Meet the EXPERT

Dr Sumayya Ebrahim is a gynaecologist in private practice in Johannesburg. She is also a blogger. Check out her blog [Vaginations](http://Vaginations.co.za) by Dr E on [Vaginations.co.za](http://Vaginations.co.za)

