

Understanding
**Thrush, Cystitis
and Women's
Genital
Symptoms**

Dr Caroline Bradbeer

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IMPORTANT NOTICE

This book is intended not as a substitute for personal medical advice but as a supplement to that advice for the patient who wishes to understand more about his or her condition.

Before taking any form of treatment YOU SHOULD ALWAYS CONSULT YOUR MEDICAL PRACTITIONER OR PHARMACIST.

In particular (without limit) you should note that advances in medical science occur rapidly and some of the information about drugs and treatment contained in this booklet may very soon be out of date.

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Dedication

My thanks to my friends, family and colleagues who have helped with this book, especially Catherine Roberts, Adrian Bower, Dr Cath Rodgers, Dr David Barlow, Diana Hamilton-Fairley, Teresa Battison and Dr Allison Mears. Their comments and support were invaluable.

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Introduction

What causes genital symptoms in women?

Women's genital symptoms are often dismissed as having two possible causes: thrush and cystitis. Although these problems are common, they are by no means the only ones to affect this region, and misunderstanding or incorrect treatment can lead to prolonged misery.

For example, antibiotics are usually given to treat a urinary tract infection such as cystitis. If you are actually suffering from a yeast infection (thrush), taking antibiotics may make your symptoms worse by killing the 'friendly' vaginal bacteria that normally keep the yeast infections at bay.

Another example is itching: thrush is the best known cause of itching around the vulva (external female genitals), but other conditions, including skin diseases such as eczema or psoriasis, can also cause it. They require their own different treatments.

Even when the diagnosis is correct and the proper treatment given, it may not be the end of the problem.

Your symptoms may recur and it is often these recurrences that cause the most trouble.

How can this book help?

At some time in your life you will experience symptoms of infection or irritation in the genital area. You may find it a lonely experience because most women do not like to discuss such intimate problems, even with close friends. You might also worry that you could have a sexually transmitted infection.

Trying to find out what the trouble is by examining this part of your body is often difficult, because it is hard for you to see it clearly and it may be embarrassing to ask someone else to look for you. This book is intended to help you if you have genital infections or urinary tract problems so that, where possible, you can work out what is wrong and the best ways to deal with it.

How to use this book

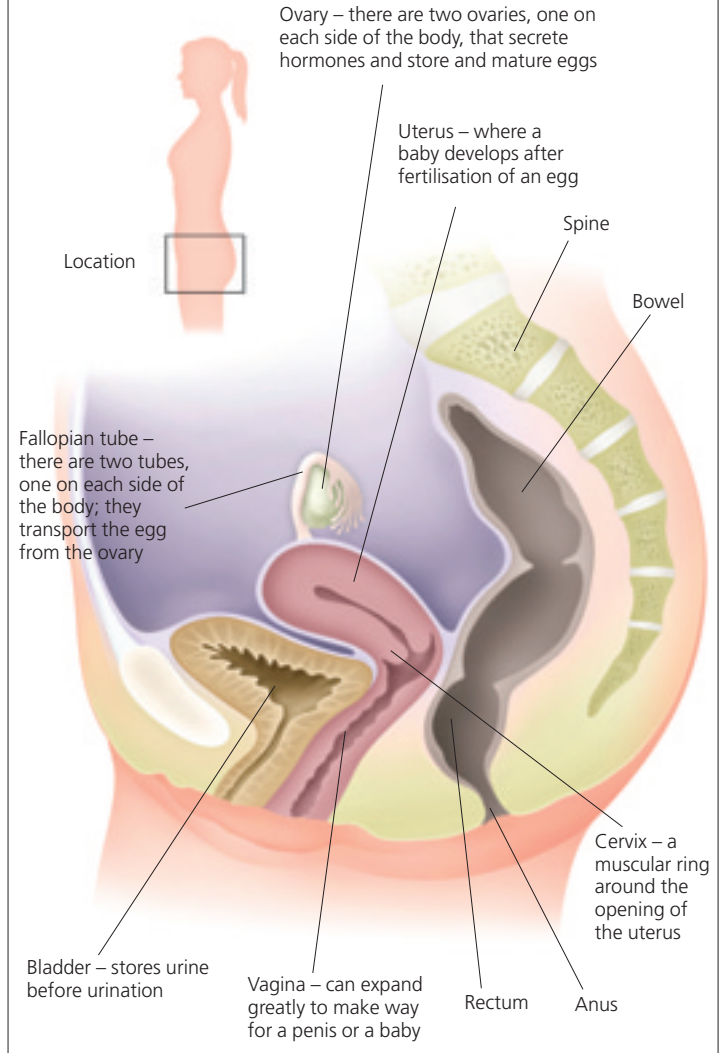
It is difficult to puzzle out what is going on in your body without an understanding of how things work, and how they relate to each other. Most conditions of the female genital tract can easily be understood, and most women can make a fair guess at what is going wrong.

Helping you assess a problem

With a bit of background knowledge, you can often make just as accurate an assessment of the problem as any doctor whom you consult. After all, you know your own body better than a stranger, you have also had longer to think about your symptoms and have more of a vested interest in getting the answer right.

The female sexual organs

This shows a cross-section through the female pelvis. The female sexual organs can be seen together with the position of the bowel and bladder.



Understanding what is normal

This book starts with a brief account of the way the female genital region is arranged (what is medically called anatomy) and the way it normally works (physiology). Armed with an understanding of what is normal, it is much easier to work out what is happening when things go wrong.

Common symptoms

The next chapter looks at the symptoms that women commonly notice, what causes them and how to work out the most likely explanation. This chapter is divided into sections, one for each symptom.

Conditions

The conditions themselves are described in detail in the chapter 'Looking for the cause of your symptoms'. Within each section you will also find answers to such questions as: 'Is the diagnosis reliable?', 'What is the treatment?' and 'What are the predisposing factors?'.

Finding out what is wrong

The answers to the above questions explain variations in the accuracy and usefulness of the tests for the condition, tell you what should be done to manage it, and let you know what factors increase your chances of having the condition again.

Seeking help

The final chapters include information on where you should seek help and what to expect, a self-help section, and a glossary to explain unfamiliar or technical terms.

KEY POINTS

- Women's genital symptoms are often dismissed as having two causes: thrush and cystitis
- It is important to obtain a correct diagnosis because incorrect treatment can prolong the misery

The female genital region: normal structure and function

The genital region

The vulva

The vulva is the external, visible, outer and inner lips of skin, which partially cover (from front to back) the clitoris, the opening of the urethra (from where urine emerges) and the vaginal opening, called the introitus. Further back still, beyond the vulva, is the anus.

Vulval lubrication

The vulva contains tiny glands that help to keep the skin in this area moist and provide lubrication for sexual intercourse. These glands produce a protective, waterproof film over the skin surface.

If allowed to build up, it can seem as if the vulva has a thick creamy substance over it which could be

confused with a vaginal discharge. At other times this waterproofing forms a thin film which can almost be peeled off, especially if the area has been washed with drying agents (astringents) such as some body washes.

How will I know if something is wrong?

Your vulva is a very sensitive piece of skin, with almost as many nerve endings as your lips or mouth, so you will tend to notice immediately when something is wrong.

Most commonly you may notice itching, soreness or pain but, because it is easy to touch the area, you may also detect changes in texture or the development of lumps. Seeing your vulva, however, is not so easy.

You can examine it by crouching over a carefully placed, brightly lit mirror, but this is difficult to arrange even when you are feeling well. As a result, subtle changes are often missed.

Also, because most women seldom examine themselves in this region, they may not know what it normally looks like and so cannot tell whether or not its appearance has changed.

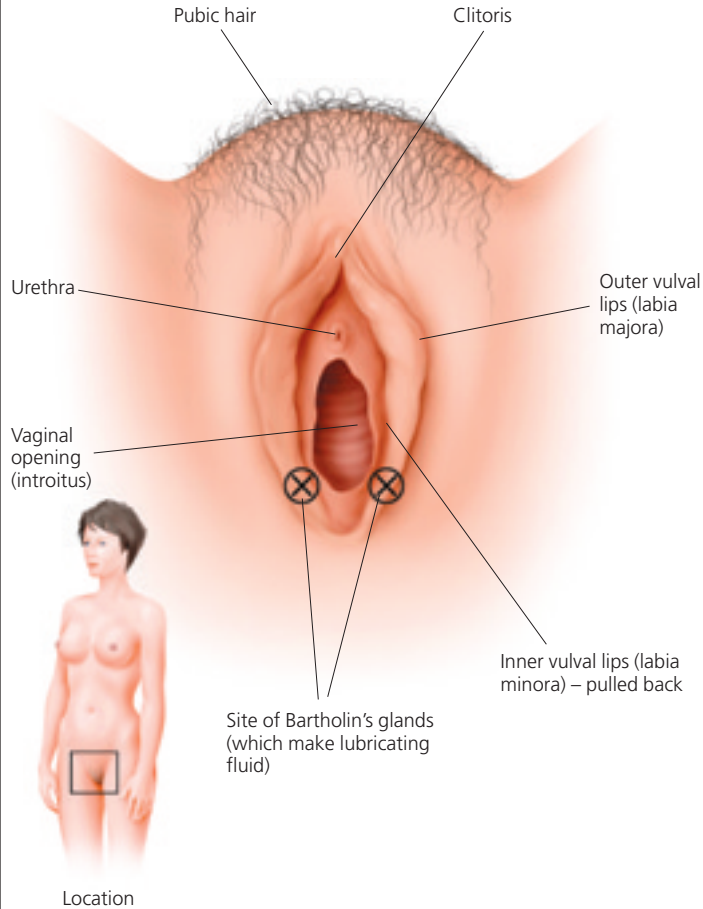
What does it look like?

The normal vulva varies hugely in appearance from woman to woman. The inner and outer lips (labia minora and labia majora) can be anything from hardly present at all to quite large flaps of skin.

The introitus is nearly always surrounded by irregular outgrowths – rather like sea anemone tentacles – which are the remnants of the hymen (the membrane covering the vaginal opening in early life). Even in virgins the hymen is often irregular, and it is a myth that anyone can reliably tell by examining a woman whether or not she is still a virgin.

The vulval area

The vulva is the external visible outer and inner lips of skin. The lips partially conceal the clitoris, the opening of the urethra and the vaginal opening. Your vulva is a very sensitive piece of skin. It has almost as many nerve endings as your lips or mouth, so you will tend to notice immediately when something is wrong.



The vagina

The vagina is a tube that can lengthen and widen not only to make room for a penis, but also to allow a baby's head and body to go through it. This stretching is possible because of the way the vaginal wall is corrugated, giving it an unusually large surface area.

The vagina contains a complex mix of microbes, proteins, mucus and fluid which make up normal vaginal secretions (see below). This produces an acid, self-cleansing environment which normally keeps a healthy, delicate balance of all its constituents within strict limits.

The vagina opens to the outside world in the middle of the vulva, the introitus. As there are relatively few nerve endings in your vaginal walls, you will not usually feel pain or itching in the vagina itself.

The cervix, uterus, fallopian tubes and ovaries

In general, the deeper inside your body an organ is found, the less sensitive it is to pain and the more difficult it may be for you to pinpoint the exact site of any discomfort. This is true of almost all the organs in your body cavity.

Pain from deep in your pelvis usually feels vague and most people, including their doctors, find it hard to say for certain where it is coming from.

The uterus

Your uterus (womb) is an organ the size and shape of an upside-down pear. It is really a muscle with a central cavity, rather like a very thick-walled bag. It lies deep in your pelvis and connects with the outside via the junction between the cervix (which is Latin for neck) and the vagina.

The fallopian tubes and ovaries

Two fallopian tubes come out of the right and left side of your uterus and the other end of each fallopian tube is loosely in contact with an ovary.

The cervix

Your cervix (neck of the womb) is a muscular ring around the opening of your uterus. It can be likened to a thick rubber band ready to hold the uterus closed around a baby in pregnancy.

The cervix and uterus have very few nerve endings and are not sensitive to ordinary touch. The cervix is not even tender when it is inflamed.

The cervix protrudes into the upper part of the vagina, and the moist membrane lining the uterus and the skin lining the vagina meet on its surface. The uterine lining is thick and red with lots of blood vessels in it (known as columnar epithelium), whereas the vaginal lining is like the skin of the inside of your mouth (squamous epithelium).

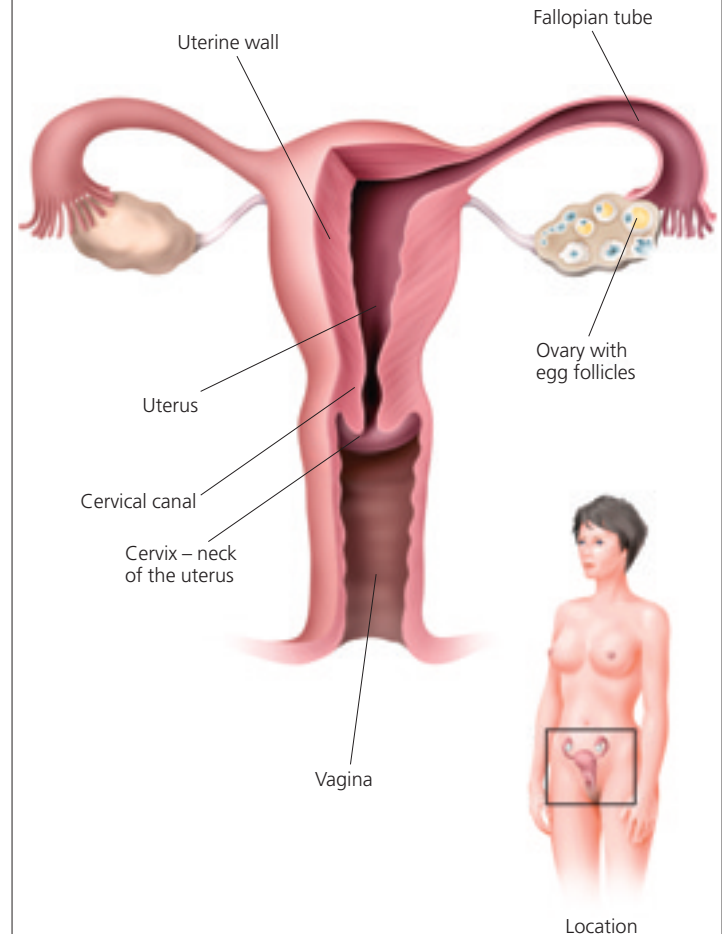
The squamocolumnar junction

The actual point where the two types of lining epithelium meet is called the squamocolumnar junction. With changes in hormone levels throughout your reproductive life, it moves its position closer to the cervical canal, or down over the outer cervix.

When the columnar epithelium, which normally lines the uterus, spreads out onto the surface of the cervix, it is known as ectopy or, by its older term, erosion. An ectopy is a fragile area of skin containing lots of secretory glands. The normal fluid and bacteria in the vagina irritate these moist lining cells and cause them to produce increased secretions.

The female reproductive organs

This shows a cross-section through the female reproductive organs. Your uterus or womb is the size and shape of an upside-down pear. It is a muscle with a central cavity connected to the outside by the vagina. It is also connected to the ovaries by two fallopian tubes.



It is, however, common to have ectopy and rare for it to be extensive enough to cause troublesome discharge. The exception to this is in pregnancy when oestrogen levels are high and a large ectopy contributes to the increase in secretions at this time.

As the junction between the columnar and squamous cells moves in and out, the skin in the area where the cervix and uterus meet changes type frequently in response to changing hormone levels. A particular area may contain squamous cells on one occasion, but columnar cells on another.

As cancer often develops in places where the cell type fluctuates, this is thought to be why cervical cancer is most likely to develop at the squamocolumnar junction.

The urinary tract

The ureters and bladder

Urine is produced by your kidneys and flows down two muscle-walled tubes known as ureters into your bladder. Your bladder is deep in your pelvis, in front of your uterus and stores urine until you are ready to urinate. It squeezes urine out of your body by contracting its muscular wall.

The urethra

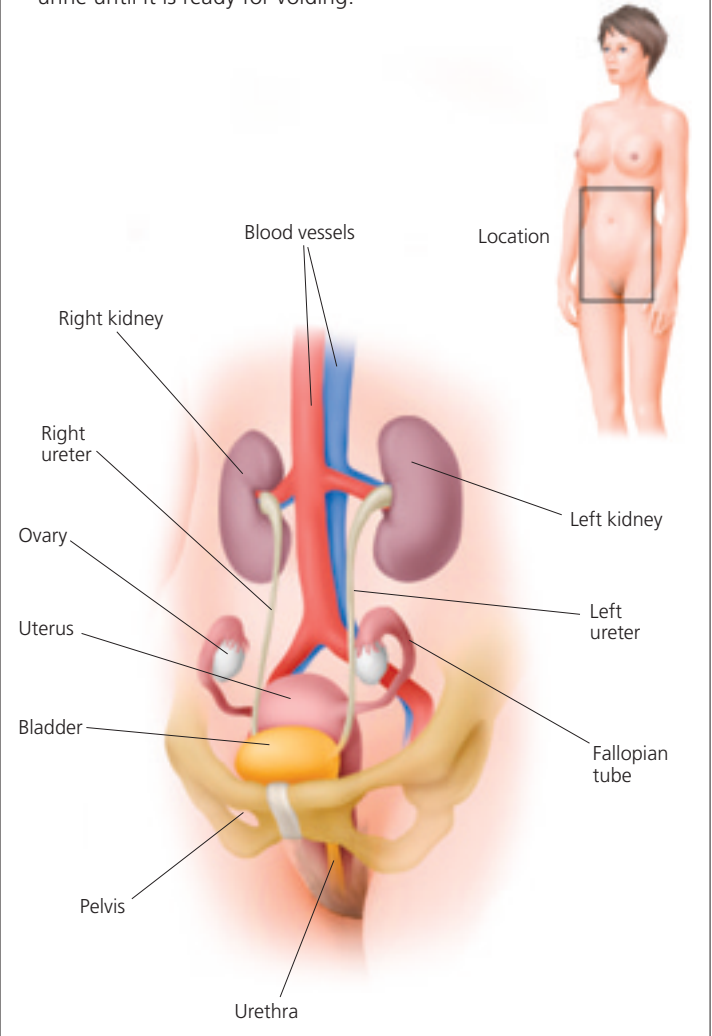
Urine flows out of the bladder through another single tube known, rather confusingly (because of the similarity of the words), as the urethra. The urethra is relatively short in women, but in men it runs the length of the penis and is therefore much longer.

How will I know if something is wrong?

The urethra follows the rule that, the closer a structure is to your body surface, the more sensitive it is.

The kidneys and urinary tract

Your kidneys filter waste products from your blood. This waste is then passed, in solution as urine, into your bladder. Your bladder is located deep in your pelvis in front of your uterus. It stores urine until it is ready for voiding.



The burning pain you feel when urine passes through an inflamed urethra during a urinary tract infection (UTI), commonly called cystitis, is known as dysuria. Inflammation of your bladder, on the other hand, leads to less specific symptoms and you may notice only a dull pelvic or back ache.

The main symptom of a UTI – frequent, painful urination – results from inflammation of your bladder, which then contracts too easily when only a small amount of urine is present.

As urine flows out of your urethra it runs over your vulva. Pain on passing urine is usually attributed to a UTI but, if your vulva itself is sore, urine that is not infected may irritate the tender skin and cause pain as a result of the abrasive chemicals that it contains.

Normal variations in vaginal secretions

The volume and consistency of vaginal secretions are usually under hormonal control. These secretions are most noticeable between puberty and the menopause and are at a maximum during pregnancy.

There is also a smaller increase in the amount of secretions produced each month at the time of ovulation. Sexual excitement will also increase the amount of fluid produced as the vagina lubricates itself ready for intercourse.

Most of the secretions come from the vaginal walls. As a result of its large surface area, the vagina can produce a large volume of fluid.

Some of the normal fluid also comes from the glands around the vulva. The largest of these glands is Bartholin's gland, with one being situated in the rear part of each labium minorum. These glands are important because they can become infected and develop into an abscess.

A small amount of secretion comes from the cervix and uterus.

The range in the amount of normal secretion produced throughout life is vast, but if you are of childbearing age you will probably experience daily staining of your underwear. It is unusual, however, for it to be sufficient to require the regular use of panty liners.

Before puberty

In prepubescent girls, the vagina seems able to resist most of the infections that affect adult women. There are microbes in the vagina but they tend to be different from those in adults and they do not cause problems.

It is rare for a girl to develop genital problems, unless they are caused by skin disease or if the girl's vagina has been subjected to some sort of physical interference or damage.

After puberty

After puberty, a number of healthy bacteria are found in the vagina, of which the most important are lactobacilli. These help keep the vagina acid, compete for available nutrients, and also produce certain chemicals which help to prevent unwanted bacteria and yeasts from becoming established.

Pregnancy

In pregnancy, the cervix, vagina and vulva become larger, with more blood flowing to them and more secretions coming from them. This increase usually starts to become apparent in the first few weeks of pregnancy and may even be the first sign of pregnancy that you notice.