

## Rectal cancer

The rectum is part of the digestive system. Once food nutrients have been absorbed by the small intestines, the waste is moved by muscular contractions into the large intestine (bowel). Water is removed and the waste is temporarily stored in the rectum, which makes up the last 20cm or so of the bowel. From the rectum, wastes pass out of the body through the anus. The rectum's lining (epithelium) secretes mucus that helps to lubricate the faeces through the anus.

Cancer of the rectum begins as cellular changes in the topmost layer of the epithelium. Rectal cancer tends to affect people over the age of 50 years, with men more at risk than women. Some people have an increased risk due to genetic factors and may develop the disease sometime after the age of 40 years.

If treated in its earliest stages, rectal cancer is highly curable. If untreated, stray cancer cells can migrate around the body via the lymphatic system and develop secondary cancers.

### Symptoms

The symptoms of rectal cancer include:

- A change in previous bowel habits, such as constipation or diarrhoea
- Urgency to pass bowel motions
- A sensation that the bowel isn't empty after going to the toilet
- Bleeding from the anus
- Abdominal pain.

### Risk factors

Factors that may increase a person's risk of rectal cancer include:

- Advancing age
- Family history of colon cancer
- Polyps in the rectum
- Pre-existing inflammatory bowel disease, such as ulcerative colitis
- High fat, low fibre, low calcium diet
- Obesity.

### Diagnosis

Rectal cancer is diagnosed using a range of tests including:

- **Rectal examination** – the doctor inserts a gloved finger into the rectum and feels for lumps.
- **Faecal occult blood test** – faecal matter is examined in the laboratory.
- **Proctoscope or sigmoidoscope** – a slender instrument is inserted into the anus to allow the doctor to look at the rectum.
- **Colonoscopy** – a longer instrument is inserted (under sedation) to check the rectum and colon.
- **Biopsy** – a small tag of tissue is removed and examined in a laboratory for the presence of cancerous cells.
- **Barium enema** – special fluid is squirted into the rectum and x-rays are taken.
- **Endorectal ultrasound** – an ultrasound device is inserted and pictures taken of the rectum.
- **Magnetic resonance imaging (MRI)** – a high-definition scan is used to determine the size and spread of rectal cancer.

### Stages of the disease

Rectal cancer is categorised into different stages including:

- **Stage 0** – the cancer is limited to the lining (epithelium) of the rectum.
- **Stage 1** – the cancer has spread to the deeper layers of the rectal lining.
- **Stage 2** – the cancer has spread to tissues beyond the rectum, but not to the lymph nodes in the local area.
- **Stage 3** – the cancer has spread to the lymph nodes in the local area.
- **Stage 4** – the cancer has developed secondary cancers at other sites around the body.

### Treatment

Treatment for rectal cancer depends on its stage, but may include:

- **Surgery** – the cancer and associated rectal tissue as well as nearby lymph nodes are removed either through the anus or via an abdominal incision. The rectum is then sewn back together. If a large amount of tissue is removed, it may not be possible to close the rectum and a colostomy will be needed, either temporarily or permanently.
- **Radiation therapy** – high doses of precisely targeted radiation are used to kill cancer cells.
- **Chemotherapy** – cancer-killing drugs are administered by intravenous injection or by mouth.

There are several specialised centres in most Australian States and Territories that treat rectal cancer. Results from treatment are generally better when treatment is provided by these specialised centres.

### Colostomy

Sometimes, so much tissue is removed that the rectum can't be sewn back together or reattached to the anus. In this case, the bowel is diverted from the anus to a small hole in the abdomen (stoma) and a colostomy bag fitted. A colostomy bag is made from plastic and is stuck to the stoma with special glue. Wastes are passed into the bag, which is then thrown away and replaced with a fresh one.

A temporary colostomy bag may sometimes be needed while a successfully remodelled rectum heals properly. Less than a third of patients that have an operation for rectal cancer will require colostomy.

### Where to get help

- Your doctor
- The Cancer Council of Victoria, Information and Support Service Tel. 131 120

### Things to remember

- The rectum makes up the last 20cm or so of the large intestine.
- The function of the rectum is to temporarily store faeces.
- Rectal cancer usually affects people over the age of 50 years, with men more susceptible than women.
- Treatment includes surgery, chemotherapy and radiation therapy.

**This page has been produced in consultation with, and approved by:**

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