

# Cancer Association of South Africa (CANSA)



Research • Educate • Support

## Fact Sheet on Primary Peritoneal Cancer

### Introduction

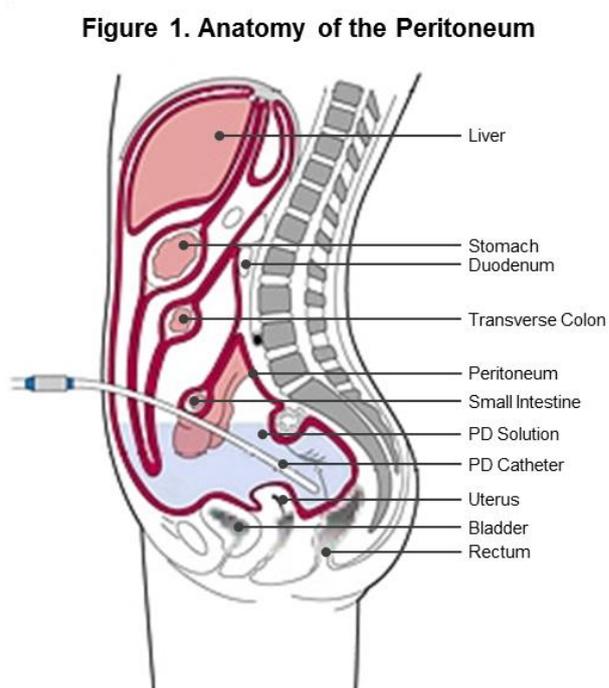
The peritoneum consists of the parietal peritoneum – a heterogeneous, serous, semi-permeable membrane that lines the abdominal wall – and the visceral peritoneum, which covers the abdominal organs (Figure 1). Its surface area is approximately 1-2 m<sup>2</sup>.

In males, the peritoneum is a closed-sac system, whereas in females it is an open-sac system with the fallopian tubes and ovaries connecting to the peritoneal cavity.

[Picture Credit: Peritoneum]

The peritoneal cavity, located between the parietal and visceral peritoneum, contains approximately 100 mL of serous fluid and becomes the dialysate compartment during peritoneal dialysis (PD) from which exchange of solutes with the blood can occur.

(Advanced Renal Education Program).



### Primary Peritoneal Cancer (PPC)

Primary peritoneal cancer (PPC) is a relatively rare cancer that develops most commonly in women. PPC is a close relative of epithelial ovarian cancer, which is the most common type of malignancy that affects the ovaries. The cause of primary peritoneal cancer is unknown.

It is important for women to know that it is possible to have primary peritoneal cancer even if their ovaries have been removed.

Primary peritoneal cancer (PPC) is a rare cancer of the peritoneum. It is very similar to the most common type of ovarian cancer called epithelial cancer. This is because the lining of the abdomen and the surface of the ovary come from the same tissue when humans develop from embryos in the

---

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

September 2018

womb. Doctors now think that most high grade serous cancers actually start in the far end of the fallopian tube rather than the surface of the ovary or peritoneum.

PPC is a cancer that mainly affects women. There are no exact numbers of how many people get it. Research suggests that between 7 and 15 out of 100 women (7 to 15%) who have advanced ovarian cancer will actually have PPC. It is very rare in men. Most people are over the age of 60 when they are diagnosed.

### **Incidence of Primary Peritoneal Cancer (PPC) in South Africa**

The South African National Cancer Registry (2014) does not provide any information regarding the incidence of Primary Peritoneal Cancer.

### **Link between Ovarian Cancer and Primary Peritoneal Cancer**

Peritoneal cancer acts and looks like ovarian cancer. This is mainly because the surface of the ovaries is made of epithelial cells, as is the peritoneum. Therefore, peritoneal cancer and a type of ovarian cancer cause similar symptoms. Doctors also treat them in much the same way.

Women at risk for ovarian cancer are also at increased risk for peritoneal cancer. This is even more likely if one has the BRCA1 and BRCA2 genetic mutations. Older age is another risk factor for peritoneal cancer.

### **Signs and Symptoms of Primary Peritoneal Cancer (PPC)**

Unfortunately, because of the vague nature of its symptoms, PPC is usually diagnosed in advanced stages of disease, when achieving a cure is difficult.

The symptoms of PPC are more commonly gastrointestinal rather than gynaecologic in nature, and include abdominal bloating, changes in bowel habits and an early feeling of fullness after eating.

When bloating is severe, nausea and vomiting may result. Occasionally, patients with PPC present with a blockage of the intestines related to tumour on or next to the bowels. Normal vaginal bleeding is infrequently seen in patients with PPC.

### **Diagnosis of Primary Peritoneal Cancer (PPC)**

In addition to asking about symptoms, one's doctor may review one's medical history and conduct a physical examination, which may involve examining for abnormalities in these areas:

- Uterus
- Vagina
- Ovaries
- Fallopian tubes
- Stomach

---

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

September 2018

- Bladder
- Colon and rectum

Tests may include:

Ultrasound - high-frequency sound waves produce a picture called a sonogram

CA-125 blood test - this test measures levels of a chemical in the blood called CA-125. If levels are high, peritoneal or ovarian cancer may be present. But CA-125 can be high for other reasons. So, this test cannot confirm a diagnosis of these cancers

CT scan - a computer linked to an X-ray machine produces detailed pictures of the inside the body

Lower GI Series or Barium Enema - with this test, the patient first receives an enema containing a white, chalky solution called barium. This outlines the colon and rectum on an X-ray. It makes it possible to spot some tumours as well as other problems

Upper GI Series - with this test, barium is swallowed and the oesophagus, stomach, and duodenum (the first part of the small intestine) are outlined on an X-ray

Biopsy - a surgeon removes tissue by opening the abdomen during a laparotomy or by inserting tools through small holes in the abdomen (laparoscopy). A pathologist studies the tissue sample under a microscope to confirm a diagnosis of cancer

Paracentesis - in cases where surgery is not possible or ascites (presence of fluid in the peritoneal cavity) could be due to other causes, the doctor may instead remove fluid for examination under a microscope. This is called paracentesis

Ovarian and peritoneal cancers look the same under a microscope. So, the pattern and location of any tumours helps indicate which type of cancer is present.

### **Staging of Primary Peritoneal Cancer (PPC)**

Staging is important as it assists in knowing how far the disease has spread. It also assists the oncologist to decide on relevant treatment.

### **Treatment of Primary Peritoneal Cancer (PPC)**

The treatment a patient may receive depends on a number of things including:

- The size of the cancer
- Where the cancer is in the abdomen
- The patient's general health

The treatment for PPC is the same as for advanced epithelial ovarian cancer. Because PPC is usually at an advanced stage when it is diagnosed it can be difficult to treat. The aim of treatment for advanced cancer is usually to shrink the cancer and control it for as long as possible.

---

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

September 2018

The main treatments may include:

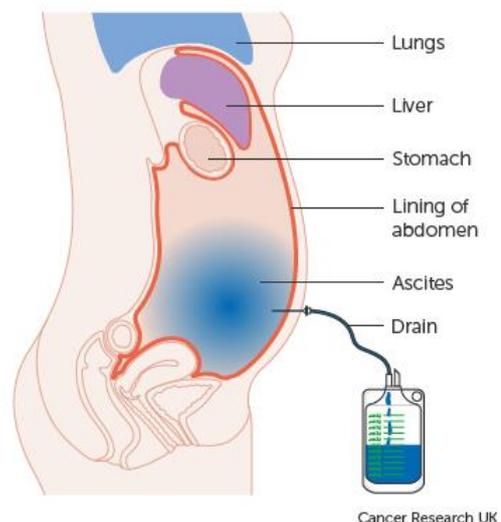
Surgery - the aim of surgery is to remove as much of the cancer from the abdomen as possible before chemotherapy. This is called debulking surgery. Chemotherapy tends to work better when there are only small tumours inside the abdomen. The surgery usually includes removing your womb, ovaries, fallopian tubes, and the layer of fatty tissue called the omentum. The surgeon may also remove any other cancer that he/she can see at the time of surgery.

Chemotherapy - chemotherapy uses anti-cancer (cytotoxic) drugs to destroy cancer cells. These drugs work by disrupting the growth of cancer cells. One may have chemotherapy:

- Before surgery to reduce the size of the cancer
- After surgery when you have recovered
- On its own if you are unable to have surgery

Radiotherapy - radiotherapy uses high energy waves to kill cancer cells. Radiotherapy is not often used for PPCs. But doctors may use it to shrink tumours and reduce symptoms.

Other treatments - if the patient is unable to have chemotherapy, he/she can still have treatment to control any symptoms, such as pain, weight loss, and fluid in the abdominal cavity. Fluid can build up between the two layers of the peritoneum. This fluid build-up is called ascites. It can be very uncomfortable and heavy. The doctor can drain the fluid off using a procedure called abdominal paracentesis or an ascitic tap. The diagram demonstrates this.



### **About Clinical Trials**

Clinical trials are research studies that involve people. They are conducted under controlled conditions. Only about 10% of all drugs started in human clinical trials become an approved drug.

Clinical trials include:

- Trials to test effectiveness of new treatments
- Trials to test new ways of using current treatments
- Tests new interventions that may lower the risk of developing certain types of cancers
- Tests to find new ways of screening for cancer

The South African National Clinical Trials Register provides the public with updated information on clinical trials on human participants being conducted in South Africa. The Register provides information on the purpose of the clinical trial; who can participate, where the trial is located, and contact details.

For additional information, please visit: [www.sanctr.gov.za/](http://www.sanctr.gov.za/)

---

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

September 2018

## **Medical Disclaimer**

This Fact Sheet is intended to provide general information only and, as such, should not be considered as a substitute for advice, medically or otherwise, covering any specific situation. Users should seek appropriate advice before taking or refraining from taking any action in reliance on any information contained in this Fact Sheet. So far as permissible by law, the Cancer Association of South Africa (CANSA) does not accept any liability to any person (or his/her dependants/estate/heirs) relating to the use of any information contained in this Fact Sheet.

Whilst CANSA has taken every precaution in compiling this Fact Sheet, neither it, nor any contributor(s) to this Fact Sheet can be held responsible for any action (or the lack thereof) taken by any person or organisation wherever they shall be based, as a result, direct or otherwise, of information contained in, or accessed through, this Fact Sheet.



## **Sources and References Consulted or Utilised**

### **Advanced Renal Education Program**

<http://advancedrenaleducation.com/content/anatomy-peritoneum>

### **American Cancer Society**

<http://www.cancer.org/Cancer/OvarianCancer/DetailedGuide/ovarian-cancer-staging>

### **Cancer Research UK**

<http://www.cancerresearchuk.org/about-cancer/cancers-in-general/cancer-questions/primary-peritoneal-carcinoma>

### **Foundation for Women's Cancer**

<http://www.foundationforwomenscancer.org/types-of-gynecologic-cancers/primary-peritoneal/>

### **Gynecologic Cancer Foundation**

<http://www.foundationforwomenscancer.org/wp-content/uploads/Primary-Peritoneal-Brochure.pdf>

### **National Cancer Institute**

<http://www.cancer.gov/clinicaltrials/learningabout/what-are-clinical-trials>

### **National Ovarian Cancer Coalition**

[http://www.ovarian.org/types\\_and\\_stages.php](http://www.ovarian.org/types_and_stages.php)

### **Peritoneum**

<http://advancedrenaleducation.com/content/anatomy-peritoneum>

### **WebMD**

<http://www.webmd.com/cancer/peritoneal-cancer-prognosis-symptoms-treatments>

---

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

September 2018

---

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

September 2018

Page 6