

# Colonoscopy



NATIONAL SCREENING  
AND EARLY DETECTION PROGRAMME  
FOR COLORECTAL CANCER

Svit 

It's time to think about yourself.

***Dear reader!***

*The brochure in your hands is intended for everyone whose result of the faecal occult blood test, taken as part of the Svit Programme, the national screening and early detection programme for colorectal cancer, has shown that there could be certain abnormalities in the colon, which calls for a detailed examination.*

*One of the fundamental goals of the programme is a detailed examination of the colon of participants who could be at risk. We hope that the brochure will help you find the answers to your questions and help you to decide and properly prepare for all the necessary tests. This way, we will jointly be able to take care of your health. We will keep inviting you to join the Svit Programme until you turn 74 years, so please save the brochure, as you may need it in the future.*

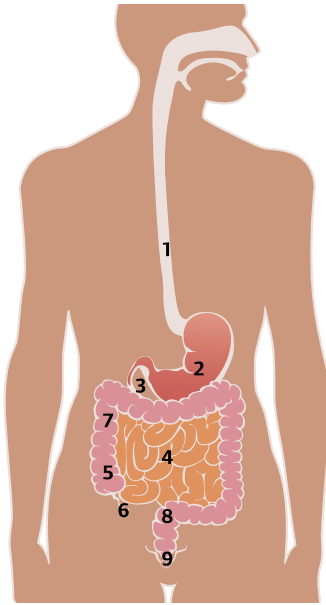
*We care about your health.*

*Yours faithfully,  
The Svit Programme Team*



# Large intestine and its functions

The large intestine is the final part of the digestive tract, which ends with anus. It is the continuation of the small intestine and is approximately 1.5 m long. This is where electrolytes and liquids are absorbed. The large intestine is also a temporary container of the stool and the organ responsible for the elimination of the digested material from the body. To do this, the large intestine needs the help of bacteria, which inhabit the large intestine as beneficial intestinal flora. The food we eat passes through the small intestine relatively quickly in the form of a thin pulp, but it stays longer in the large intestine, where it mashes and thickens, and the remains are prepared for elimination.



1 oesophagus; 2 stomach; 3 duodenum;  
4 small intestine; 5 caecum; 6 appendix;  
7 large intestine; 8 rectum; 9 anus

We are usually not aware of how important it is to have a healthy large intestine until problems appear. And even then we are often surprisingly quite indifferent about this part of our body, which is very wrong. Normal bowel movement is an important part of the digestive tract and if we notice any long-lasting problems, we must consult a general practitioner. You shouldn't be embarrassed; such things are usual for doctors and are a part of their job. Digestion and defecation are important and vital parts of life.

# Colonoscopy

Examination of the inside of a human body, performed by a special medical instrument – an endoscope – is called an endoscopy. Endoscopy of rectum and large intestine is called a colonoscopy and is **the most important diagnostic method for the detection of abnormalities in the large intestine and rectum**. It enables a detailed examination of the bowel mucous membrane and the removal of a tissue sample for detailed examination.

The **colonoscopy** is an endoscopic examination of the entire large intestine using a colonoscope – a flexible tube composed of numerous optic fibres which transmit a picture of the inside of the colon to a screen, which enables the doctor to check the mucous membrane of the entire large intestine and rectum. Before the examination, the patient must use proper laxatives to empty and clean the colon. The doctor can remove any polyps from the colon during the colonoscopy (polypectomy). If the doctor spots a tumour during the examination, they will take a sample of the tissue for further examination – this is called a biopsy. The tissue is microscopically examined by pathologists who then prepare a pathohistologic diagnosis, which confirms or refutes the suspicion of cancer or some other intestinal disease.

The colonoscopy is performed in the hospital or in any of the outpatient clinics specialised for the treatment of intestinal diseases (gastroenterological clinics) as well as in diagnostic centres. The

examination is usually not painful, although it can be slightly unpleasant. In the framework of the Svit Programme, the Center Svit will organize such examination according to your agreement.

The colonoscopy is the most reliable diagnostic method of detecting precancerous and cancerous changes in the large



*Colonoscope*

intestine and rectum. If the colonoscopy result is completely normal, the next colonoscopy usually needs to be performed after ten years. This time is shorter for people who show a higher risk for developing colorectal cancer; a gastroenterologist schedules the next colonoscopy based on the information about the type of risk. Since colorectal cancer does not develop the same in all people, it is important to keep a close eye on the functioning of your intestine; if you notice any problems (such as changes in defecation, for example constipation followed by diarrhoea or very thin stools, gases, abdominal pain, blood in the stool or other abnormal abdominal problems), you should consult your general practitioner. If any abdominal problems appear suddenly and are severe, you need to consult your doctor immediately.

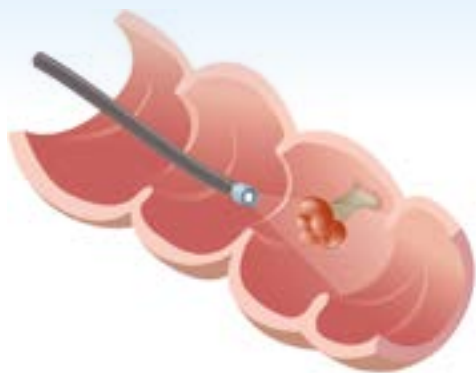
## What are the results of the colonoscopy

Traces of blood in your stool can indicate on the presence of abnormalities, which the doctor can find by performing a colonoscopy. It is very likely that this detailed examination won't show any abnormalities in your intestine. No abnormality is found in approximately one third of all cases. However, the following abnormalities can be discovered during the colonoscopy:

### Colon polyps

A polyp is a tissue formation (growth), which grows from the mucous membrane and protrudes from the lining of the colon or rectum into the colon. **Experts advise the removal of all polyps from the large intestine and rectum because cancer almost always develops from polyps.** Small polyps often don't cause any problems. If they do, the most common one is bleeding from the colon. A large polyp can cause cramps, abdominal pain or severe constipation. Exceptionally it can cause a complete blockage of the colon if it blocks the movement of the stool and gasses in the colon, which is not only very painful but it can even be fatal.

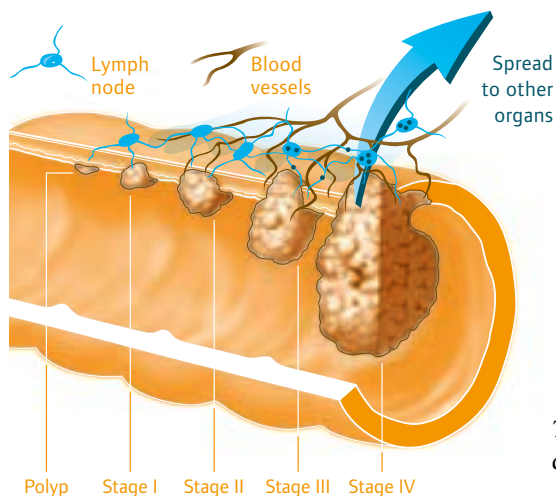
Colon polyps are found in more than half of the persons tested who are more than 50 years old. Most of them are removed during the colonoscopy, which often ends the treatment. Additional procedures are only necessary in the case of large polyps or polyps that show the symptoms of cancer.



Polyp

### Chronic inflammatory bowel diseases (ulcerative colitis, Crohn's disease)

Ulcerative colitis and Crohn's disease are the most common chronic inflammatory bowel diseases. The risk of developing cancer is higher in patients suffering from any of these diseases, which requires more frequent colonoscopies. Patients suffering from these diseases usually receive special supervision and care by a specialist.



The stages of colorectal cancer

### Tumour

A tumour develops if the cells in the large intestine or rectum start dividing uncontrollably. Tumours can be benign or malign.

Benign tumours don't cause any major problems. Once removed, they usually don't grow back and don't spread to other parts of the body. Malign

tumours in the large intestine and rectum are called colorectal cancer. Cancer cells divide fast and spread into the surrounding tissues, even into other body parts, where they metastasize.

**It is of utmost importance that cancerous changes in the colon are found as early as possible when they can still be successfully cured.**

## *Why does colorectal cancer appear and what are the risk factors for its development*

The cause for the development of the disease has not yet been entirely explained. Studies show that colorectal cancer is most likely the result of a combination of family history factors and the environmental impacts. Risk factors are those factors that increase the probability of an individual falling ill. The probability of getting colorectal cancer has been proven to increase due to the following factors.

**Age.** The fact that approximately 90 % of patients are more than 50 years old when diagnosed with colorectal cancer, puts age **in the first place among risk factors**. For this purpose, experts recommend screening and diagnostic tests in this age period.

**Environment (food, alcohol, smoking, unhealthy lifestyle).** The risk for the development of colorectal cancer is increased with overconsumption of meat and fats. Experts advise a diverse diet, rich in fruit and vegetables with lots of fibres. In the intestine, fibre bloats when it comes in contact with liquid and binds many harmful substances that we eat or that have been produced during digestion. Fibre accelerates bowel movement and shortens the time when the digested substances are in contact with the mucous membrane of the intestine. The faster the intestine empties, the fewer harmful substances affect the cells of the mucous membrane. An unhealthy lifestyle increases the risk of developing cancer. Not enough exercise, being overweight, excessive alcohol consumption and smoking increase the risk of getting colorectal cancer. A healthy lifestyle doesn't only protect you from cancer but also from many other diseases.

**Colon polyps** represent a hidden risk of the development of cancer, which is why they must be found and removed as soon as possible.

**Certain hereditary diseases**, although very rare, considerably

increase the risk. Such diseases are various polyposis syndromes and hereditary nonpolyposis colorectal cancer, in which case the risk for developing other types of cancer is also increased. The people whose close blood relatives have developed colorectal cancer are at higher risk for developing such cancer. Therefore, it's important to know the medical history of your closest blood relatives.

**Everything you have read about the large intestine and changes that could appear in this organ has probably convinced you that it is really important to find out what is going on in your body as soon as possible. Therefore, do not hesitate with a colonoscopy.**

## *Getting ready for a colonoscopy*

**A colonoscopy is an examination which requires your active engagement if you want it to be successful.**

As a part of the Svit Programme, your examination will be organised by the Center Svit in agreement with you and your general practitioner. Your general practitioner has already been informed about the positive results of the faecal occult blood test. **You must visit your general practitioner within one week after you've received the letter with the laboratory results.** Together you will prepare the documentation for your further medical treatment, and determine if you have any medical issues that would prevent a colonoscopy.

### **1 Visit your general practitioner**

Your general practitioner will monitor the entire course of the examinations and your treatment. After talking to you and performing a general check-up, they will determine if your current health condition allows you to undergo a colonoscopy. You may need to change your current medications before the colonoscopy procedure, since they might affect the course of the examination (especially anticoagulants). Tell your general practitioner exactly which medications you are taking on a regular basis. **Do not stop taking any medications without your doctor's consent and follow their instructions.**

If you have diabetes or kidney, heart or lung disease, high blood pressure, haemophilia, epilepsy or any other chronic disease, you must



consult your general practitioner who will advise you about how to take your current medications before the examination.

***Before you visit your general practitioner:***

- Carefully read the instructions provided in the letter in which we informed you about the laboratory results of your stool sample analysis. Take the letter and all the enclosed documents to your general practitioner.
- Fill in the part of the questionnaire, which we have sent you, that refers to your family’s medical history (anamnesis). If you are not familiar with the details, contact the competent health institution. Your general practitioner will fill in all other sections of the questionnaire together with you.
- Arrange a health insurance certificate.
- Prepare a list of all the medications you are taking for other health problems.
- Gather all the results concerning your health condition in the recent period – your general practitioner may need them.
- Prepare any questions that you have about the course of the examination, so you can ask your general practitioner. To make sure you don’t forget anything, it’s best to write them down:

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**2 After the appointment with your general practitioner, call us immediately on 01/62-04-522 and inform us whether you are (or are not) medically fit for a colonoscopy.**

Together, we will schedule the best time and place for your examination. We will also answer any of your additional questions.

**3 We will send you by post a notice about the confirmed date and time of the colonoscopy at the selected specialist clinic.**

#### **4 Cleanse your colon**

In order for the colonoscopy to be successful, your colon must be completely clean during the examination (without any stool residues). If not, the doctor will not be able to see the colon mucous membrane well enough and the examination will have to be rescheduled. You can clean your colon in two ways: by limiting the food you eat a few days before the examination and by drinking a special liquid on the day of the examination. **It is extremely important that you follow the instructions for colon cleansing in detail.** This is the only way for the procedure to be successful and safe.

#### **ONE WEEK BEFORE THE COLONOSCOPY:**

- Adjust your medications in accordance with your general practitioner's instructions.
- Do not eat fruit with small seeds (grapes, kiwi, tomatoes – seeds can get temporarily stuck in the colon's walls and obstruct the examination) and wholegrain bread.

#### **ONE DAY BEFORE THE COLONOSCOPY:**

- Do not eat any solid foods. You can drink clear fruit juices, clear soup, and tea. Don't eat or drink any dairy products or alcohol.

If you have diabetes, your general practitioner will give you special instructions on the cleansing procedure as well as on food and medications before and after the examination.

## **CLEANSING YOUR COLON IMMEDIATELY BEFORE THE COLONOSCOPY**

Dissolve the laxative you have received from the pharmacy in water and drink it as stated in the enclosed instructions. If your colonoscopy is scheduled in the morning, start the cleansing procedure the evening before; if you are scheduled for the afternoon, start the cleansing very early in the morning of the same day. Please follow the instructions thoroughly. The laxative will stimulate your bowel movements. Continue drinking the liquid in accordance with the instructions until the liquid you eliminate has become clear.

## *The course of the colonoscopy*

Take the following items to the institution where the colonoscopy will be performed:

- your valid Slovenian health care insurance card,
- the documentation and instructions provided by your general practitioner,
- the completed questionnaire about the preparation for the colonoscopy,
- the medications you are taking for other diseases,
- pyjamas and toiletries only if you have been instructed to spend a night in hospital.

**We recommend that you have somebody escort you to the examination.** If you are given a sedative or a painkiller during the examination, you will not be able to drive any motor vehicle for 24 hours. Thus, you will need someone to drive or escort you home. You may be kept in hospital for observation until the following day, so you may need someone to run some errands for you.

The examination usually takes 20 to 60 minutes. During the colonoscopy, you will lay on your side or on your back. In order for the doctor to better see your bowel mucous membrane and any abnormalities, they will blow air into your bowel during the procedure; as a result, you may feel bloated, full of liquid or you can get cramps. Pain during the procedure is extremely rare. In case you will feel any pain, tell your doctor so they can act on it.

During the colonoscopy, the doctor may perform some other procedures: remove polyps (polypectomy), take a small tissue sample for further examination (biopsy), and stop bleedings from injured blood vessels, etc.



*Colonoscopy*

## *Can colonoscopy be dangerous*

Complications are extremely rare. Bleeding may occur during the removal of any polyps but it usually stops without additional procedures. Exceptionally, a colon perforation can occur, which requires surgery.

**It is very important to have a completely clean colon for the colonoscopy to ensure that the procedure is really safe.**

## *After the procedure*

After the colonoscopy, the doctor will tell you how it went, if any abnormalities were found, if any polyps were removed, if a biopsy was performed, etc. The doctor will immediately tell you if no special changes in your large intestine were found. If tissue samples were taken for a more detailed examination, you will have to wait for the results. A biopsy doesn't mean that the doctor has found cancer; it merely means the doctor wants to make sure what kind of tissue it is.

After the colonoscopy, you will stay in the medical institution for short observation. Exceptionally, you can be kept in for observation until the following day.

### *Possible complications after the colonoscopy*

Even though complications after the colonoscopy are very rare, it's important that you know the signs of such complications to be able to recognise them in time. If you experience a strong pain in your stomach or significant bleeding from your colon (light bleedings will soon pass), if your body temperature increases or you get a fever, you must immediately consult your general practitioner. Bleeding can exceptionally occur a few days after polyps have been removed, so you need to pay close attention to your stools for a few more days.

## *Possible further treatment*

Sometimes, the doctor cannot perform the entire examination or remove all the polyps which could develop into cancer. In this case, the doctor will discuss with you about the suitable course of further treatment.

If it turns out that you need special treatment, you will consult the specialists and your general practitioner about it.

Additional examinations will be performed to determine any abnormalities. You will then agree on the most suitable treatment for you.



You may want to share your experience with someone who has already undergone a colonoscopy and other examinations, or who has even undergone a cancer treatment. In Slovenia, you can contact the following organisations where such people are active and where you can get advice:

### **Društvo onkoloških bolnikov Slovenije**

Poljanska cesta 14, 1000 Ljubljana

**telephone:** 01/430-32-63, **mobile phone:** 041/835-460, **fax:** 01/430-32-64

**e-mail:** dobslo@siol.net

**website:** [www.onkologija.org](http://www.onkologija.org)

### **Zveza invalidskih društev ILCO Slovenije**

#### **Zveza ILCO Slovenije**

Trubarjeva 15, 2000 Maribor

**telephone:** 02/228-22-05, **fax:** 02/228-22-06

**e-mail:** [info@zveza-ilco.si](mailto:info@zveza-ilco.si)

**website:** [www.ilco-zveza.si](http://www.ilco-zveza.si)

**working time:** Monday, Wednesday, Thursday and Friday from 8:00 to 12:00

### **Europacolon Slovenija**

Povšetova 37, 1000 Ljubljana

**telephone:** 041/574-560

**e-mail:** [info@europacolon.si](mailto:info@europacolon.si)

**website:** [www.europacolon.si](http://www.europacolon.si)

### **Zveza slovenskih društev za boj proti raku**

Trubarjeva cesta 76a, 1000 Ljubljana

**telephone:** 01/430-97-80

**fax:** 01/430-97-85

**e-mail:** [info@protiraku.si](mailto:info@protiraku.si)

**website:** [www.protiraku.si](http://www.protiraku.si)



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