

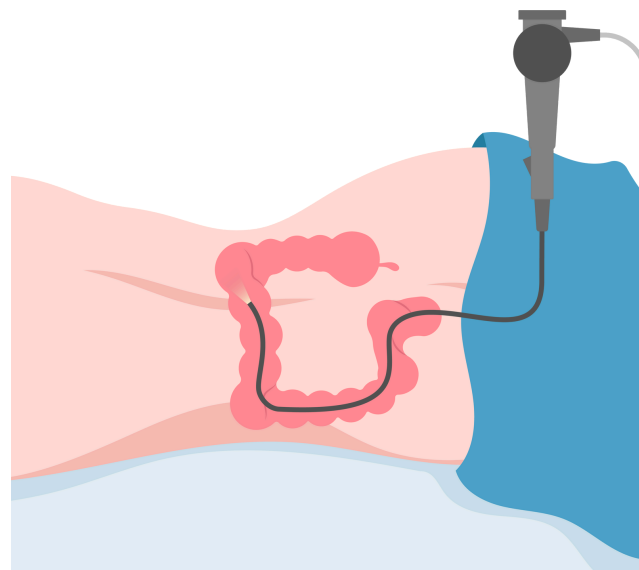
# Direct Access Services - Colonoscopy

## About Direct Access Services

Direct Access Services is a programme by Woodlands Health (WH) that allows patients seeking medical attention at primary care facilities to have direct referral access to endoscopy, minor surgery, and advanced imaging, bypassing the need for a consultation with a specialist.

## Why Am I Being Referred for this Procedure?

Based on your symptoms, your doctor has referred you for a minor procedure known as 'colonoscopy'. Information about this procedure can be found on pages 3 to 6.



## What to Expect

1

### Before Procedure

- Your doctor submits a referral to WH.
- Your doctor briefs you on the estimated procedure cost.
- A WH staff will give you a call to arrange an appointment and provide financial counselling.



2

### Procedure Day

- Arrive at the Endoscopy Centre at Woodlands Health Campus, Tower A, Level 2.
- Register at the Patient Services Station.
- A doctor will conduct a screening check and seek your consent before the procedure.



3

### After Procedure

- A WH staff will advise you on next steps including booking of a follow-up appointment (if needed) and payment.
- Please return home to rest.
- Depending on your results, you may be informed to follow up with your doctor or specialist.



## About Colonoscopy

### 1. What is colonoscopy?

Colonoscopy is a procedure to investigate your large intestine or bowel (colon). Some parts of the small intestine (terminal ileum) can also be investigated. Using the camera on the tip of a flexible tube, diseases that affect the internal lining of the colon can be detected. Your doctor can remove polyps (lumpy growth that can become cancerous) from the internal lining of the colon, or take samples (biopsy) for further evaluation. Piles or haemorrhoids (swellings of the blood vessels in the region of the anus) can also be treated by tying with a medical rubber band.

### 2. Why do I need this procedure?

Your doctor has recommended that a colonoscopy is required to investigate the signs and symptoms of diseases that may be attributable to the colon or to screen for colon polyps or colon cancer.

### 3. What are the preparations for the procedure?

You will be given special instructions on your diet and on how to prepare your bowels before the scope. Please follow these instructions closely so that your bowels are properly prepared before the procedure.

You should not eat (or drink anything EXCEPT for plain water) for at least 6 hours before the procedure. You are allowed to drink plain water or take your usual medications (unless otherwise instructed) until 2 hours before the procedure. Your doctor may advise you to fast longer if you have certain medical conditions or for certain procedures.

During fasting, you will be advised on withholding or modifying the dosage of your diabetic medications. To reduce the risk of bleeding, your doctor may advise you to stop consuming any blood thinners (sometimes up to two weeks) prior to the procedure/surgery.

Your doctor may also advise replacing it with an alternative temporary treatment. Please continue to take all your other usual medications, unless otherwise instructed by your doctor.

#### **4. How is the procedure performed?**

A camera on the tip of a flexible tube will be inserted into your anus by an endoscopist. It will be maneuvered from the end of the large intestines (the rectum and anus) till the beginning of the large intestines (the caecum and sometimes the terminal ileum). Using the camera, the endoscopist will be able to detect diseases that affect the internal part of the large intestines.

#### **5. What are the risks and complications of the procedure?**

There are small risks to the procedure, such as:

- Bowel perforation:

This occurs when the tip of the colonoscope goes through the bowel wall, resulting in perforation (causing a hole in the bowel wall). This may rarely occur with the removal of polyps or performing a biopsy. This is a serious complication as bowel contents (stool) may leak from the large intestine into the abdomen and can result in severe infection and death. An emergency operation may be required. The risk of perforation is very low, about 1 in 1000 cases (0.1%).

- Bleeding:

The removal of polyps (polypectomy) or performing a biopsy may also result in bleeding. Additional measures (e.g. injection of medication or usage of clips) may be performed to stop the bleeding. The risk of bleeding is less than 3%. The risk of bleeding if a polypectomy is performed may range from 0.1% to 6%. This may occur after you are discharged from the hospital.

Symptoms of bleeding from the colon commonly presents as passage of red or maroon-coloured blood, with or without any accompanying stool during bowel motion. Severe bleeding may cause fainting spells. You should go to the Accident & Emergency department if bleeding occurs. If some blood thinning medications are not discontinued for the recommended duration, the risk of bleeding may be higher.

- Sedation:

Sedation risks are rare and some possible side effects are: decreased rate of breathing, changes in heart rate and blood pressure, headache, nausea and vomiting, and inhalation of stomach contents into the lungs. The effects of sedation can vary considerably between individuals. Use of potentially dangerous machinery, driving and other similar activities within 24 hours of the procedure IS DANGEROUS AND STRONGLY DISCOURAGED.

- Incomplete colonoscopy and missed pathology:

A complete colonoscopy is achieved when your doctor succeeds in maneuvering the endoscope all the way to the caecum or beyond. However, due to anatomy, adequacy of bowel preparation or bowel disease, this may not be possible in less than 5% of the time. If your colonoscopy is incomplete, after the procedure, you may be advised to have a repeat colonoscopy or a separate procedure performed to complete the evaluation of your large intestine.

- Risks of piles ligation (if applicable):

Rubber band ligation can rarely precipitate severe bleeding which may need further procedures to treat. It can also cause pain and retention of urine (temporary inability to urinate). In very rare cases, it can lead to severe infection of the perianal region.

## **6. What would I expect after the procedure?**

You may experience some bloating and flatulence caused by the air that was pumped in during the procedure. This is normal and will improve quickly. Our staff will monitor you in the observation area for a short period of time to ensure you recover well from the sedation. Generally, no post-procedure analgesia is required. Light refreshments will be provided before you leave Endoscopy Centre.

## **7. What are other treatment options besides colonoscopy?**

CT colonography is a X-ray investigation where the colon is filled with air and a CT scan is used to image the large intestine. You will need to remain still during the procedure and be able to hold air within the colon. Interventions such as removing polyps or taking a biopsy cannot be performed during barium enema or CT colonography. Therefore, if any abnormality is found, a subsequent colonoscopy may be required. There is also lower accuracy in picking up abnormalities, namely small lesions less than 5mm in size, or flat lesions.

Comparatively, the colonoscopy can visualise and pick up the smallest lesions, followed by CT colonography.

## **8. What will happen if I do not undergo the procedure?**

Your doctor has indicated that your medical condition requires further evaluation with a colonoscopy. Failing to undergo this procedure may delay the entire diagnostic process or result in misdiagnosis of a potentially serious medical problem.

## Medication

Polyethylene Glycol Electrolyte (PEG) solution is used to empty the colon before endoscopy. You may experience nausea, vomiting and diarrhoea.

### Important:

- Do continue taking your medication for heart disease and high blood pressure.
- Consult the nearest doctor if you experience vomiting or severe abdominal pain (stomachache).
- Stop taking blood thinning medication (such as anti-platelet agents and anti-coagulation medication) and iron tablets, as advised by your doctor.
- Do not take your diabetes medication on the day of your colonoscopy.

## One Day Before Procedure

### Dietary Restrictions

- Take only light, low-fibre meals such as:



Whitebread  
(no spread)



White porridge/  
rice



Lean meat  
(chicken/fish)



Eggs



Coffee/tea  
(no milk)

- Stop taking any dairy products, oily and high-fibre foods such as:



Dairy  
Products



Fruits and  
vegetables



Whole  
grains/oats

Time	Instructions
	Start taking the PEG solution 1 day before your colonoscopy.
7am	Light low-fibre breakfast
12pm	Light low-fibre lunch
6pm	Light low-fibre dinner
6.30pm	Stop consuming solid food until your procedure is done. Please observe fasting instructions as indicated to avoid procedure from being postponed.
7 - 9pm	Prepare the PEG solution by mixing 2 sachets of PEG powder with 8 glasses of water (total of 2L). Consume the solution and finish it by 9pm.
9 - 11pm	Drink water to replenish the water loss from the effects of drinking the PEG solution.



## Day of Procedure

Time	Instructions
5 - 6am	<p>No consumption of food is allowed.</p> <p>Prepare the PEG solution by mixing 1 sachet of PEG powder with 4 glasses of water (total of 1L). Consume the solution and finish it by 6am.</p> <p>You should stop drinking water 2 hours before your colonoscopy appointment.</p>

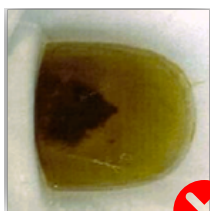
## Good vs Poor Bowel Preparation

Inadequate bowel preparation reduces the effectiveness of the colonoscopy procedure and may require a repeated procedure.

If your stool appears like stool 1 to 4 shown below, please report to the Endoscopy Centre 2 hours before your procedure. Your doctor may advise you on additional medication for your bowel preparation.

Stool 1

Dark brownish and large solid clumps



Stool 2

Brownish and small solid clumps



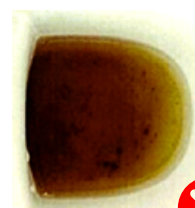
Stool 3

Light brown liquid with sediment



Stool 4

Light brown liquid with minimal sediment



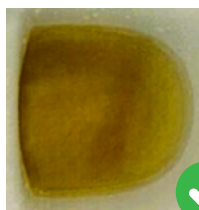
Stool 5

Brown clear liquid



Stool 6

Light yellow, clear liquid



Clean colon after good bowel preparation



## Arriving For Your Appointment

- On the day of your procedure, please arrive at:  
Endoscopy Centre, Tower A, Level 2  
Woodlands Health Campus  
17 Woodlands Drive 17  
Singapore 737628



Directions to Woodlands Health Campus



Getting around Campus

- Please arrive 1 hour before your appointment time.
- If you do not receive your appointment details within 3 working days from the date of your clinic visit, please call the Endoscopy Centre at 6361 6021 (Monday to Friday, 8.30am to 5.30pm).
- Please keep to your scheduled date. If you are unwell (i.e. fever, cough and flu) or wish to postpone/ cancel the procedure, please call the Endoscopy Centre during its operating hours, or the Contact Centre at 6363 8000 (Monday to Friday, 8.30am to 5.30pm and Saturday, 8.30am to 12.30pm).

## Documents to Bring

### Identification

- Singapore NRIC
- SAF identity card (11B)
- Non-Singaporeans: Passport, entry permit, employment pass, work permit or other valid ID issued by the Singapore Ministry of Manpower

### Medical Benefit Documents (if applicable)

- Civil Service card
- Insurance card
- Insurer's or employer's guarantee letter (if the bill is covered by your employer)
- Blood donor card
- Financial assistance card/ memo (e.g. PA, MediFund, SMTA, MFEC)

### Others

- Referral letter from your doctor

## Consent

Your consent for the procedure will be obtained from you on the day of the procedure.

## Personal Care

Please do not wear any of the following for the procedure:

- Contact lenses
- Make-up
- Jewellery
- Nail varnish



We also ask that you do not bring too much cash, and bring minimal personal belongings as the lockers provided are small.

## Discharge Care

- Please arrange for an adult (21 years old and above) to accompany you home if possible.
- Do not drive or operate any vehicle upon discharge.

Disclaimer: This information sheet mentions some of the more common or important risks of surgery/ procedure. It does not and cannot cover every possible scenario or detail.

