

Work and

Common Gastrointestinal Diseases



Occupational Safety and Health Branch
Labour Department



Safety at work

This booklet is prepared by
the Occupational Safety and Health Branch, Labour Department

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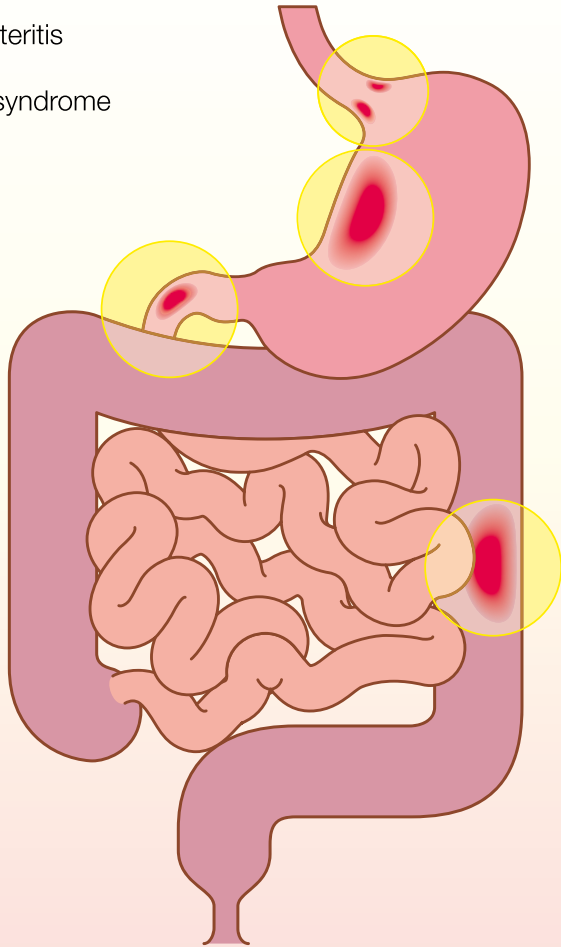
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What are Gastrointestinal Diseases

Gastrointestinal (GI) diseases usually refer to those diseases of the digestive tract. Hectic life and busy work predispose workers to GI diseases and the common ones are:

- ◆ Gastric and duodenal ulcer
- ◆ Gastroesophageal reflux disease (GERD)
- ◆ Acute gastroenteritis
- ◆ Irritable bowel syndrome



Gastric and Duodenal Ulcer

A mucosal layer protects the inner wall of the digestive tract. The mucosal layer may be damaged if gastric acid secretion is excessive, causing inflammation and ulceration. In severe cases, it may result in perforation of the gut and stomach.

Signs and Symptoms

- ◆ Episodic upper abdominal pain
 - In general, ingestion of food would precipitate the pain in patients with gastric ulcer but relieve the pain in patients with duodenal ulcer
 - The pain frequently awakens the patients at night



- ◆ Symptoms of indigestion such as bloating, belching, nausea and vomiting
- ◆ Black, tarry stool or vomiting of blood



Causes

- ◆ Helicobacter pylori infection
- ◆ Medication such as aspirin and nonsteroidal anti-inflammatory drugs (NSAIDs)
- ◆ Smoking
- ◆ Tension and excessive stress at work



- ◆ Bad eating habit such as irregular mealtime, binge eating, frequent intake of food and beverages that irritate the stomach e.g. spicy food, coffee and alcohol

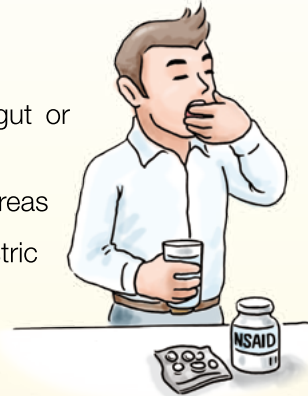
Treatment

◆ Medication

- Suppress the secretion of or neutralise excessive gastric acid by appropriate drugs e.g. antacid, Histamine H2 antagonist and proton pump inhibitor
- Eradicate *Helicobacter pylori* infection by a combination of antibiotics and gastric acid secretion suppressing drug

◆ Surgery / Endoscopy

- Suitable for severe cases
 - Repair the perforated areas of the gut or stomach
 - Remove the ulcerated and bleeding areas
 - Cut the vagus nerve to reduce gastric acid secretion



◆ Correct bad habits

- Maintain a good eating habit
- Quit smoking
- Avoid alcoholism
- Do not self-medicate to treat pain disorders by taking aspirin and NSAIDs

Gastroesophageal Reflux Disease (GERD)

Dysfunction of the sphincter at the junction of the oesophagus and stomach causes regurgitation of the gastric content and consequently discomfort, and in severe cases oesophagitis and oesophageal strictures.

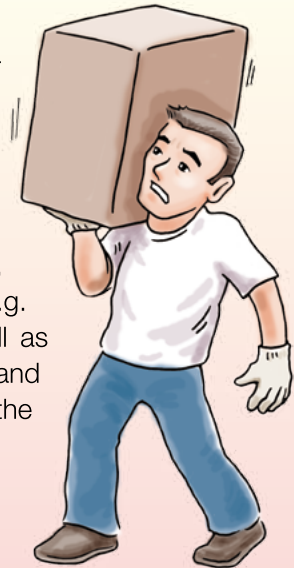
Signs and Symptoms

- ◆ Heartburn and upper abdominal pain
 - The symptoms usually occur after eating
 - When the pressure within the abdomen increases, e.g. during bending and manual lifting, or when lying down, regurgitation increases and thus aggravates the symptoms
- ◆ Gastric acid regurgitation
- ◆ Difficulty in swallowing



Causes

- ◆ Dysfunction of the lower oesophageal sphincter
- ◆ Irregular peristalsis of the oesophagus
- ◆ Delayed gastric emptying
- ◆ Certain diseases (e.g. hiatus hernia, neuromuscular disease) and medications (e.g. nitroglycerin, calcium channel blocker), as well as works requiring manual lifting of heavy objects and frequent bending may cause or aggravate the disease



Treatment

◆ Medication

- Suppress the secretion of or neutralise the excessive gastric acid by appropriate drugs e.g. antacids, Histamine H2 antagonist and proton pump inhibitor

◆ Surgery

- Suitable for severe cases

◆ Correct bad habits

- Quit smoking
- Avoid fatty food
- Keep an ideal body weight
- Avoid consuming tea, coffee or soft drinks, etc



Acute Gastroenteritis

Acute gastroenteritis is mainly due to intake of food or water contaminated by bacteria, viruses or toxins. It occurs all year round, but viral gastroenteritis is more common during winter.

Signs and Symptoms

- ◆ Diarrhoea
- ◆ Colicky abdominal pain
- ◆ Nausea and vomiting
- ◆ Loss of appetite
- ◆ Low grade fever



Causes

- ◆ It is generally due to intake of food or water contaminated by bacteria, viruses or toxins. Examples are:
 - Bacteria such as Salmonella, Shigella
 - Viruses such as Noroviruses, Rotavirus
 - Toxins such as toxins secreted by Staphylococcus
- ◆ Handling patient's vomitus or faecal matter



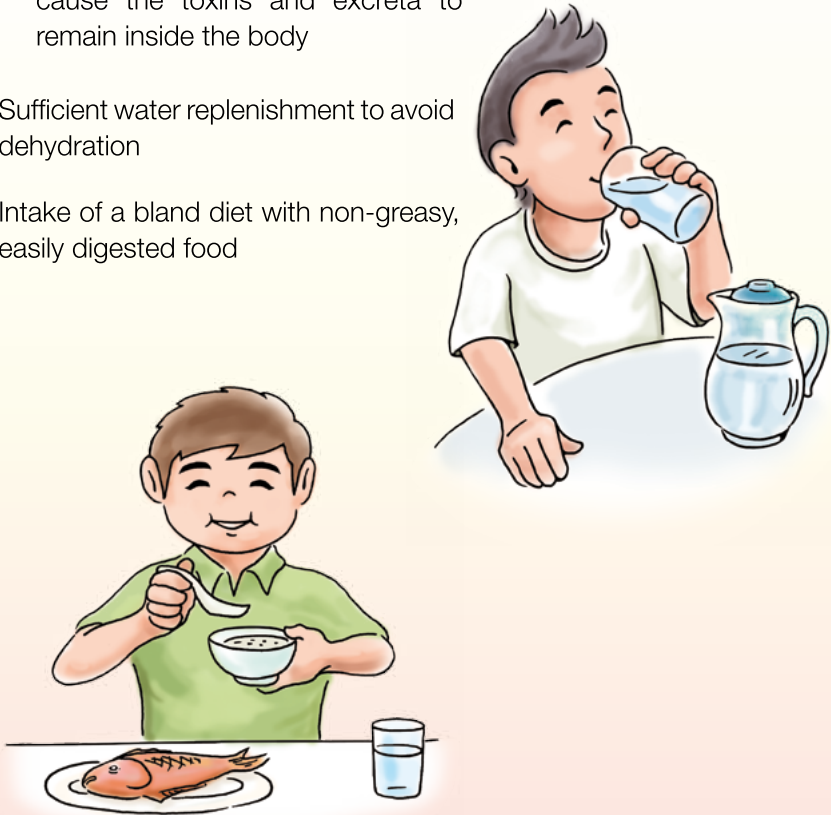
Treatment

◆ Medication

- Antibiotics are appropriate only for the treatment of some bacterial gastroenteritis, but do not have any therapeutic effect on gastroenteritis caused by viruses or toxins
- Anti-diarrhoea drugs do not have any therapeutic effect but may cause the toxins and excreta to remain inside the body

◆ Sufficient water replenishment to avoid dehydration

◆ Intake of a bland diet with non-greasy, easily digested food



Irritable Bowel Syndrome

Irritable bowel syndrome is a functional disorder of the gut. Patients respond drastically to many external stimuli, causing abnormal peristalsis, spasm and excessive mucus secretion of the gut.

Signs and Symptoms

- ◆ Long standing abdominal pain or discomfort
- ◆ Constipation, diarrhoea or constipation alternating with diarrhoea
- ◆ Symptoms of indigestion such as bloating, belching and nausea
- ◆ Copious amount of mucus in stool



Causes

The exact cause for irritable bowel syndrome is unclear. It is believed that the disease is a functional disorder of the digestive tract, which causes dysfunctional peristalsis. The following factors are important:

- ◆ Bad eating habit, such as irregular mealtime, long-term intake of food with low fiber, high fat or high sugar content, and excessive drinking of coffee
- ◆ Tense emotion
- ◆ Bad bowel habit such as habitually disregarding the urge of defaecation





Treatment

- ◆ Maintaining a healthy lifestyle
 - Maintain a good eating habit
 - Quit smoking
 - Take more food rich in fiber



- ◆ Staying easy all the time
 - If you have tension or are constantly under stress at work, you should seek psychological counselling



- ◆ Medication
 - Anti-cholinergic agent may improve diarrhoea
 - Patients whose major symptom is constipation may use laxatives



How Work affects GI Diseases

Pay attention to certain work situations or requirements which may affect the normal functioning of the gastrointestinal tract, for example:

1. Work stress

Excessive work stress may result in tension, causing increased secretion of gastric acid and peristalsis, and consequently predisposing the patients to GI diseases such as gastric ulcer, duodenal ulcer and irritable bowel syndrome, etc.



2. Work pattern

Shift work, night work or irregular work schedules may disturb the eating and bowel habits, and thus cause GI diseases such as gastric ulcer, duodenal ulcer and gastroesophageal reflux disease, etc.

3. Work nature

In occupations involving care of patients with gastroenteritis or contact with their excreta, particularly those working in elderly homes or nurseries, workers should watch out for the risk of contracting gastroenteritis.

4. Working posture

Frequent bending and heavy lifting at work may increase pressure within the abdomen and cause or aggravate gastroesophageal reflux. Workers should make good use of mechanical aids and adopt correct technique in moving heavy objects to reduce the abdominal pressure caused by lifting heavy objects.

5. Working environment

Where the nature of work and working environment render ready and timely use of toilet facilities difficult, workers may have to withhold the urge of defaecation, disturbing the bowel habit and thus causing irritable bowel syndrome.

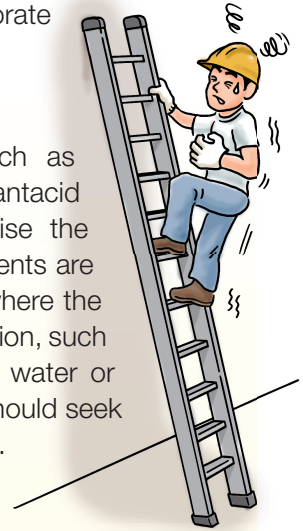


How GI Diseases affect Work

In general, there is minimal impact on work when GI diseases are stable and well under control. However, as the diseases deteriorate or when complications occur, they may affect work.

Treatment

- ◆ Some patients may suffer from side effects such as dizziness and fatigue after taking medications e.g. antacid and proton pump inhibitors. This may compromise the safety of the patients and other people. If these patients are engaged in work which is inherently hazardous or where the safety of others may be affected by their health condition, such as working at height, underground work, work on water or under water, operating machines and driving, they should seek doctor's advice to avoid the occurrence of accidents.



Complications

- ◆ GI diseases may cause belching and nausea that will affect the client's impression on the patients.
- ◆ Frequent abdominal pain and diarrhoea may cause inconvenience at work and also affect work performance.
- ◆ Some acute gastroenteritis may be spread through handling the vomitus or excreta of patients. If the patients' work involves production or handling of food products, they should pay particular attention to their personal hygiene and adopt appropriate measures such as taking sick leave while harbouring the infection to avoid spreading the disease to co-workers or other people.
- ◆ GI diseases may cause various serious complications, such as oesophagitis, oesophageal stricture, GI bleeding and acute peritonitis that may affect working abilities. Therefore, patients with GI diseases should have regular follow-up consultations with their attending doctors so that any complications can be diagnosed and treated early and appropriate advice on safety and health at work given.



Patients with GI Diseases should

- ◆ Understand your own illness
- ◆ Follow health advice given by health care professionals and make follow-up consultations regularly
- ◆ If in need, take the medications according to the schedule every day and know the therapeutic actions and side effects of the medications
- ◆ Maintain a good eating habit
- ◆ Maintain a regular living habit
- ◆ Exercise regularly
- ◆ Bring along enough medication when on a trip, especially when going overseas for work




Most of the GI diseases, such as gastric ulcer, duodenal ulcer, gastroesophageal reflux disease and acute gastroenteritis are curable. A healthy lifestyle with effective treatment can prevent or alleviate complications, and help maintain good health condition for work.



Care with a Loving Heart Card

Patients with GI disease may need help because of sudden change in their health conditions, e.g. occurrence of complications such as acute GI bleeding and peritonitis which may cause sudden incapacitation and loss of consciousness. To safeguard your safety at work, the Labour Department has designed for you a “Care with a Loving Heart Card”. By carrying this card with you while at work, your colleagues and health care providers can immediately refer to your health condition and other relevant information on the card and give you appropriate advice and treatment in case of any emergency.

 **Care with a Loving Heart Card**

Name :

Illness :

Medications :

Hospital / Clinic : (Name)

(Address/Tel.)

Enquiries

For enquiries on this booklet or advice on occupational health and hygiene matters, please contact the Labour Department's Occupational Safety and Health Branch through:

Telephone : 2852 4041

Fax : 2581 2049

E-mail : enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation can also be found on our website <http://www.labour.gov.hk>.

Information on the services offered by the Occupational Safety and Health Council can be obtained through hotline 2739 9000.

Complaints

If you have any complaints about unsafe workplaces and practices, please call the Labour Department's occupational safety and health complaint hotline at 2542 2172. All complaints will be treated in the strictest confidence.

