Preventive measures for colorectal cancer

Q & A:

1. What is cancer?

Cancer is a disease of the body's cells. Normally, cells grow and multiply in an orderly way. However, damaged genes can cause them to behave abnormally. They may grow into a lump called a tumor. These lumps can be benign (not cancerous) or malignant (cancerous).

A malignant tumor is made up of cancer cells. When it first develops, this malignant tumor is confined to its original site. If these cells are not treated they may spread into surrounding tissue and to other parts of the body.

2. 2010 Most common cancers in Hong Kong

(Source: Hong Kong Cancer Registry, Hospital Authority)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Site</th>
<th>Mortality number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lung</td>
<td>3696</td>
</tr>
<tr>
<td>2</td>
<td>Colorectal</td>
<td>1864</td>
</tr>
<tr>
<td>3</td>
<td>Liver</td>
<td>1530</td>
</tr>
<tr>
<td>4</td>
<td>Stomach</td>
<td>686</td>
</tr>
<tr>
<td>5</td>
<td>Breast</td>
<td>566</td>
</tr>
<tr>
<td>6</td>
<td>Pancreas</td>
<td>473</td>
</tr>
<tr>
<td>7</td>
<td>Non-Hodgkin lymphoma</td>
<td>362</td>
</tr>
<tr>
<td>8</td>
<td>Oesophagus</td>
<td>332</td>
</tr>
<tr>
<td>9</td>
<td>Nasopharynx</td>
<td>320</td>
</tr>
<tr>
<td>10</td>
<td>Prostate</td>
<td>319</td>
</tr>
</tbody>
</table>

In 2009, there were 4,335 new colorectum cancer cases and 1,752 colorectal cancer deaths. This ranks as the 2nd leading cause of the cancer deaths.

3. What are the causes and risk factors of colorectal cancer?

In most people, the cause of colorectal cancer is still unknown. However we know that some factors are associated with an increased risk of developing colorectal cancer:

- **Age**: The risk of colorectal cancer increases with age. It is most common among people aged 50 and above
- **Diet**: Diet high in animal fat and low in fiber, may increase the risk of developing cancer of the bowel.
- **Family history**: If you have first-degree relatives with bowel cancer, you have an increased risk of developing colon cancer.

- **Personal history of bowel polyps or cancer**: If you have previously developed bowel polyps or bowel cancer, though these were already removed, your risk of developing the disease again is higher.

- **Other environmental factors**: Lack of physical activity, obesity, smoking and heavy alcohol intake is all associated with an increased risk of developing the disease.

- **Inherited diseases**: Patients with the former disease of Familial Adenomatous Polyposis (FAP) and Hereditary Nonpolyposis Colorectal Cancer (HNPCC) Syndromes will develop hundreds of benign polyps in the colon that eventually progress to cancer. These are inherited in an autosomal dominant pattern which is characterised by the development of colorectal cancers at an early stage, and in multiple family members.

4. **What are the symptoms of colorectal cancer?**

While early stage colorectal cancer may often have no symptoms, symptoms sometimes do occur:

- **Blood or mucus noticed in the bowel motion or the toilet bowl**

- **Changes of bowel habits and last for more than two weeks**: such as alternating diarrhoea, constipation, narrowing of the stool, or a persistent feeling of incomplete emptying after a bowel movement

- **Abdominal discomfort** (gas pain, bloating, fullness or cramps)

- **Unexplained weight loss**

- **Fatigue**

5. **Can colorectal cancer be prevented?**

Colorectal cancer development takes time and goes through different stages of polyp growth (usually takes 5 - 10 years). Detection and removal of early stage polyps can prevent the development of cancer. Even when cancer has developed, early-stage cancer has a very high chance to be successfully treated. Thus, regular check-up of the colon is essential to preventing colorectal cancer.

U.S health department authorities recommend Colorectal Cancer screening regularly, the frequency depending on the type of test conducted. Screening in the general population mainly include a faecal occult blood test once a year or
once every two years, flexible sigmoidoscopy once every 5 years or colonoscopy once every 10 years, beginning at age of 50.

Our hospital provides different colorectal screening and testing services. If you are aged 50 or above, or if you are under 50 but have a family history of colorectal cancer, please contact our resident doctor to arrange a colorectal checkup for you.

6. **How colonoscopy be done?**

**Before** colonoscopy exam, you need to follow a low residual diet 3 days before. The doctors will prescribe the bowel preparation medications for you as well. These medications are to induce the bowel motions so as to cleanse and eliminate all faecal matter from the colon. This is important to follow those instructions as it can enhance a clear view for the doctors during the colonoscopy exam. Without proper bowel preparation, the colonoscopy will not be successful and may need to be repeated.

**Before starting the colonoscopy exam**, doctors will give you some intravenous medications to make you sleep. This is to reduce pain which caused by the stretching of colon.

A long-tube like flexible colonoscope about 130 cm in length and 1.3 cm in diameter will then be inserted by the doctor through the anus, and advances it to the whole large bowel. If abnormality is seen during the colonoscopy, small amounts of colon biopsy will be taken for pathology analysis.

The procedure time for colonoscopy takes about 30 to 45 minutes.

7. **If polyps are found during colonoscopy, can they be removed? How to remove?**

Polyps can be removed if they are found during colonoscopy through the colonoscope. This procedure called polypectomy. Small polyps can be removed with an endoscopic electrosurgical hot biopsy forceps. Larger polyps can be removed by an endoscopic electrosurgical snare around the polyp base and burning through it with electric cautery. The cautery can also help to stop bleeding after the polyp is removed.

If polyps are found during a colonoscopy, patients may need to repeat colonoscopy regularly. The interval for the next colonoscopy depends on the number, size and histology of the polyps removed, and whether the polyp has been completely removed. The interval to repeat colonoscopy may range from 2 months to 5 years which depends on their individual doctors’ recommendations.
It no polyps are found, patients are recommended to repeat colonoscopy every 10 years.

8. **Is it necessary to admit into the hospital or stay overnight for colonoscopy?**

No, colonoscopy can be performed as an out-patient procedure. You only need to stay for 2 hours after the procedure for observation. It will take about half a day in the usual circumstances.

9. **What are the complications that associated with colonoscopy?**

Colonoscopy and polypectomy are generally safe. One possible complication is a perforation or tear through the bowel wall that could require surgery. This occurs rather infrequently and the numbers are usually around one patient per 1000 cases that undergo colonoscopy. Bleeding might occur at the site of biopsy or polypectomy, but it's usually minor. Some patients might have a reaction to the sedatives or complications from heart or lung disease.