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Tackling gastric cancer in young adults

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Gastrointestinal (GI) cancer accounts for 26 per cent of the global cancer incidence and 35 per cent of all cancer-related deaths. It is a type of cancer that affects the gastrointestinal tract and other organs which are situated around that area. GI cancer affects the whole digestive system, which includes the oesophagus down to the anus.

Among these, gastric cancer, more commonly known as stomach cancer, merits particular attention. As the third-most-common cause of cancer death in the world, the prognosis for gastric cancer is rather poor. To further aggravate the problem, recent studies find a rise in gastric cancer cases among the younger population.

The average age for a diagnosis of gastric cancer in the US is 68 years, but increasingly patients below 50 years are being diagnosed with the disease. The incidence and prognosis in young patients globally have shown considerable variability and efforts to deal with it are hampered by the limited availability of data.

The challenges

It's not surprising that younger patients are more likely to present at an advanced stage with aggressive stomach tumours. The fact that 80 per cent of gastric cancer cases are asymptomatic in the early stages, coupled with the failure to correctly diagnose cases among the young, is a huge challenge in dealing with this disease.

The five-year survival rate for gastric cancer is 31 per cent worldwide and 21 per cent in Asia. It is an aggressive disease, made all the more menacing by the fact that early signs and symptoms of the disease are non-specific. This makes cancer difficult to cure, as most patients don't show any symptoms in the early stages and when they present with symptoms they are at an advanced stage.

Symptoms for the growth of cancerous cells within the lining of the stomach include unexplained weight loss, loss of appetite or feeling full even with small meals, nausea or vomiting and difficulty in swallowing or eating. A warning sign is usually persistent abdominal pain that has not responded to medication or treatment.

The risk factors

While non-specific symptoms prove to be a barrier to the early detection of gastric cancer, the risk factors are well understood. These include genetic factors, seen in 10 per cent of the cases and more common among the younger population, as well as environmental influences. One of the most common risk factors is infection with chronic *H Pylori* bacterial infection. This is the common bacteria which causes gastritis and gastric ulcer. The infection can lead to persistent inflammation in the stomach, increasing the risk of gastric cancer. Apart from *H Pylori* bacterial infection, smoking and alcohol consumption are some other risk factors of gastric cancer.

Dietary factors are also one of the main causes of gastric cancer. Since cancer is associated a lot with the digestive system, food intake plays a very vital role. Red and processed meat, salty food and a high intake of pickled vegetables are known to increase the risk of gastric cancer. A 2020 study of two specialist cancer hospitals in Nepal found that "frequent consumption

of red meat, processed meat, high preferences of salt, fats/oil, and condiments," are high-risk factors for gastric cancer.

Indian scenario

The lower incidence of gastric cancer cases in the overall number of cancer cases is not a reason to take our eyes off this threat. India's large population means that in absolute numbers, cases of gastric cancer are substantial. Also, it is the fourth most common cancer in the country.

A 2011 report published in the *Indian Journal of Medical and Pediatric Oncology* cited studies showing that while the incidence of gastric cancer in the country appeared low, in some geographical areas like Southern India and the north-eastern states, the rates of the disease were comparable to the Western countries.

The report referred to a controlled study in Thiruvananthapuram which found that the consumption of rice, chilli and food at high temperatures were risk factors. Similarly, in Mizoram, the high incidence of gastric cancer cases could be attributed to dietary and genetic factors.

The increased consumption of sweets, salty snacks, processed meat, alcohol, smoking and obesity are all important risk factors that have to be considered both, for younger and older gastric cancer patients. Not to forget, genetic predisposition and environmental factors further contribute to the growing incidence of cases. Of late, we are seeing an increasing incidence of this disease in young adults, which can be attributed to changing lifestyles among this population.

Sustainable solutions

While there are treatment options for gastric cancer, such as endoscopic resection, gastrectomy, chemotherapy, radiotherapy, surgery and immunotherapy, reducing the risk factors to prevent the disease is a far more sustainable solution, as is the case with most cancers.

Giving up smoking, avoiding alcohol, salty foods, hot food or beverages and processed meat can reduce the risk factors considerably. It's prudent to make changes to one's lifestyle and diet to reduce your risk for stomach cancer.

The Nepal study found that regular consumption of fruits had a "protective effect against gastric cancer". It was also found in other studies that eating fruits, especially citric fruits and vegetables, increased one's ability to fight against gastric cancer.

Studies have found that the most effective way to cut down the risk for stomach cancer is to battle and treat *H Pylori* infections. According to a global study, South Korea has been rated highest for people with stomach cancer. A long-term study reported that treatment of *H Pylori* infections, in patients who had a family history of gastric cancer, halved their risk of developing the disease.

Timely measures

It is unfortunate, but true that younger adults who present themselves with symptoms of gastric cancer are also most likely to be misdiagnosed. It is therefore essential for medical practitioners to be more vigilant. Just because a patient is young, gastric cancer should not be ruled out, especially when there are risk factors, like a family history or other lifestyle-related causes.

The delayed onset of symptoms and poor prognosis places an additional responsibility on the healthcare sector to reduce the misdiagnosis of this disease. The high mortality rate calls for creating awareness both among the public and the healthcare sector, as early detection can help in increasing the chances of successfully treating the disease. While there are no routine screening tests for detecting gastric cancer, countries with a high incidence of the disease, like Korea, Japan and China, have had success in reducing risk factors by screening for *H Pylori* infections and treating them. Some countries with high rates of gastric cancer have also offered an upper endoscopy screening for patients over 40 years of age.

Collective action

According to the National Cancer Institute in the US, a majority of stomach cancer survivors are those who were diagnosed in the early stages before cancer had a chance to spread to other parts of the body.

Recently, researchers at Flinders University in Australia have developed a blood test for bowel cancer, which could also be used to detect oesophagal and stomach cancers. These are early days, but the clinical trial offers new promise.

It's important to ensure that there's greater awareness about gastric cancer and people are encouraged to discuss the risk factors with their healthcare providers or physicians. Medical practitioners should be willing to have an open discussion with patients about the disease, risk factors, and chances of survival.

There has to be a greater push from all stakeholders, including public health practitioners and healthcare organisations, to support further research into the disease as well as spread the word about the protocols related to early diagnosis and timely treatment. Particularly now, with the growing incidence of gastric cancer cases in younger patients. This is the time for collective action.

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