StarHealth

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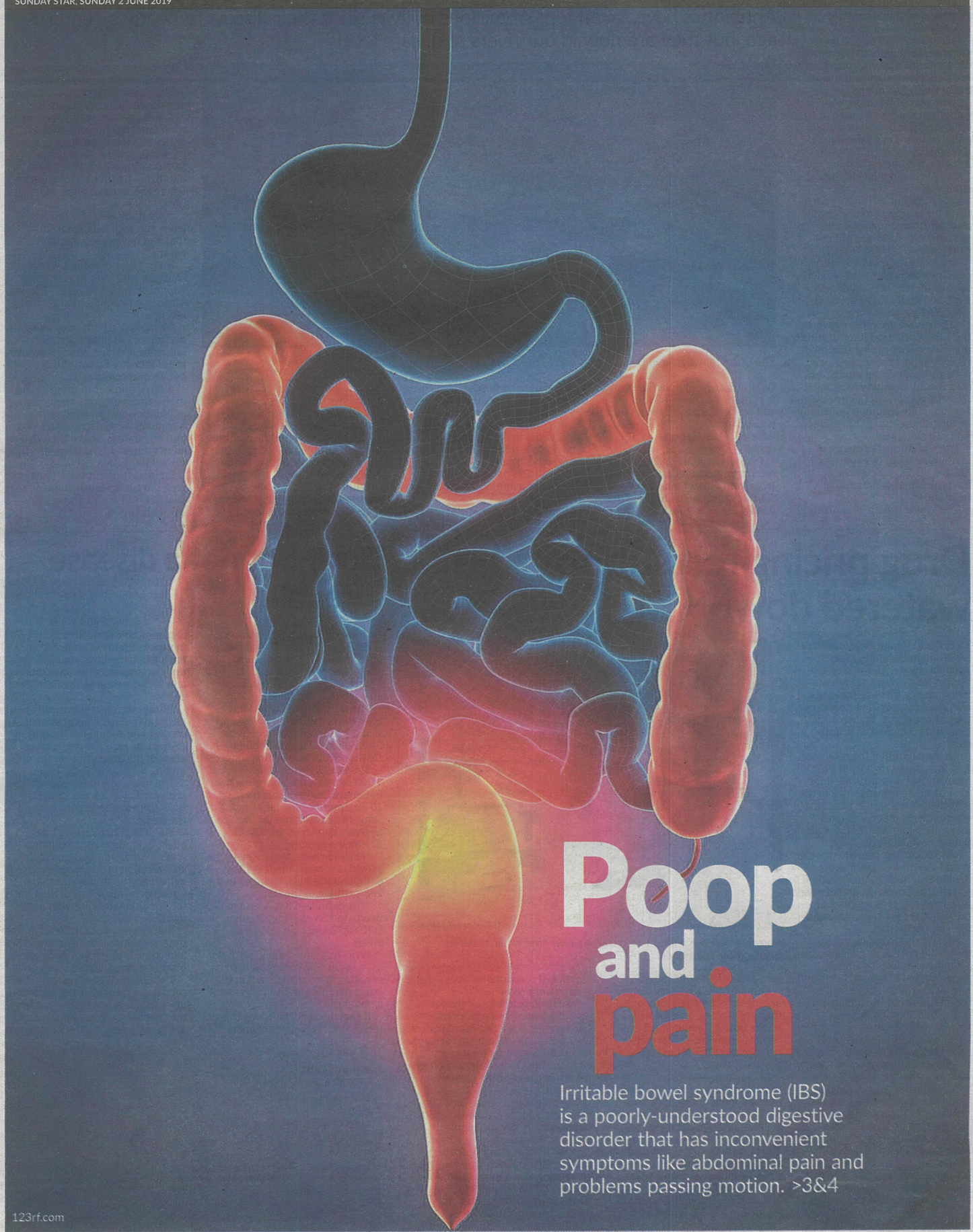

Poop and pain

Irritable bowel syndrome (IBS) is a poorly-understood digestive disorder that has inconvenient symptoms like abdominal pain and problems passing motion. >3&4

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Gut problems?

In conjunction with World Digestive Health Day on May 29, we take a look at one of the less serious, but still debilitating digestive disorders.

DIGESTIVE health disorders and diseases affect millions of individuals worldwide and its impact is reflected in decreased quality of life for the patient and increased healthcare costs and work absenteeism.

Most digestive conditions can be categorised as one of two disorders: organic diseases and functional digestive disorders.

Organic diseases are serious illnesses marked by anatomical, structural (tumours or masses) or biochemical abnormalities, as seen in *Helicobacter pylori* infection, colorectal cancer and gastroesophageal reflux disease (GERD).

Functional digestive disorders like dyspepsia, functional abdominal pain, functional constipation and functional diarrhoea, on the other hand, do not exhibit such abnormalities.

IMU Healthcare family medicine physician Dr Sasikala Devi Amirthalingam explains: "Functional bowel disorders are disorders characterised by persistent and recurring gastrointestinal (GI) symptoms that occur as a result of abnormal functioning of the GI tract.

"Abnormal motility leads to disorganised painful contractions of the gut.

"However, routine medical tests often produce normal or negative-for-disease results."

The most common and widely-researched functional digestive disorder is irritable bowel syndrome (IBS).

IBS is a chronic digestive disorder of the large intestine that needs to be managed for the long term.

"IBS is often characterised by abdominal pain; cramping or bloating that is typically relieved or partially relieved by passing a bowel movement; excess gas; diarrhoea or constipation, or sometimes, alternating bouts of diarrhoea and constipation; and mucus in the stool.

"The disorder may be caused by several factors, which include inflammation of the intestines or an overly-reactive immune system response following a severe episode of bacterial or viral gastroenteritis, and bacterial overgrowth in the intestine or changes in the gut microflora," says Dr Sasikala.

She notes that IBS is more prevalent among women and those under the age of 50.

Patients may have a family history of IBS, as genes do play a role in the condition.

They may also share triggering factors in the same family environment, or the condition may be due to a combination of genes and environment.

"Anxiety, depression and other mental health issues, or a history of sexual, physical or emotional abuse, are also risk factors.

"Stress may aggravate symptoms of IBS as most people with IBS experience worse or more frequent signs and symptoms during periods of increased stress.

"While many people may have worse symptoms eating certain foods, a true food allergy rarely causes IBS," she adds.

Diagnosis and treatment

According to IMU Healthcare medical director and consultant gastroenterologist and physician Professor Datuk Dr Kew Siang Tong, prevalence rates of IBS vary from 4.4% to 21.8% in Malaysia, similar to Western nations and East Asia.

Studies on Asian prevalence rates are relatively scarce.

Looking at a human anatomical model are (from left) Dr Sasikala, Prof Kew, Puvessha and Kanimolli. — IMU Healthcare

However, a 2003 survey among healthy Malaysian young adults in a public university found prevalence of 15.8%.

"IBS is classified into four subtypes: IBS with predominant constipation (IBS-C), IBS with predominant diarrhoea (IBS-D), IBS with mixed bowel habits (IBS-M) or IBS, unsubtyped.

"A study conducted in IMU in 2006-2007 using the Rome II criteria, found a prevalence of 23%, of which 35% was IBS-C, 35.4% IBS-D, and 29.2% IBS-M," says Prof Kew.

She shares that IBS is currently diagnosed via the Rome IV (2017) criteria of recurrent abdominal pain of at least one day per week in the last three months, with symptoms associated with a change in the frequency of stool and/or change in the form or appearance of stool.

These symptoms need to have occurred for a period of at least three months, with the first symptom starting six months before diagnosis.

"Symptoms that cumulatively support the diagnosis of IBS include abnormal stool frequency of more than three bowel movements a day or less than three bowel movements a week; abnormal lumpy, hard, loose or watery stool; straining; urgency; a feeling of incomplete evacuation; and a feeling of abdominal distension," she adds.

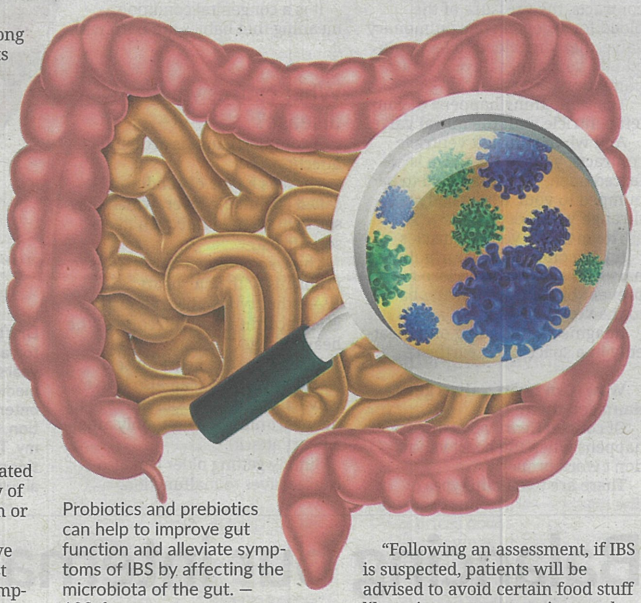
Prof Kew shares that inflammatory bowel disease (IBD) may be confused with IBS as the symptoms are somewhat similar.

IBD is a term for chronic conditions that include ulcerative colitis and Crohn's disease.

Long-standing ulcerative colitis may evolve into colorectal cancer.

She says that unlike cancer, there is no issue with needing early detection for IBS.

"It is more of an inconvenient disorder to have, as patients worry about making it to the toilet on time, especially when they are out and about."



Probiotics and prebiotics can help to improve gut function and alleviate symptoms of IBS by affecting the microbiota of the gut. — 123rf.com

Diagnosis for IBS generally involves the exclusion of more serious conditions.

In addition to taking a good medical history, a physical examination that involves pelvic and rectal examinations, is usually performed.

Red flags include unintentional weight loss, fever, older age, family history of colorectal cancer, rectal bleeding, refractory diarrhoea, anaemia and abnormal physical signs.

Simple blood tests like a full blood count and ESR (erythrocyte sedimentation rate), as well as examining stools for occult (unseen) blood, ova, cysts and parasites may be undertaken.

Sigmoidoscopy and colonoscopy may be recommended for those over the age of 50, or if organic disease is suspected.

Prof Kew says that IBS is a poorly understood disease as its cause and mechanism is not clear-cut, and has few effective treatments.

"Following an assessment, if IBS is suspected, patients will be advised to avoid certain food stuff like onions, peppers, spices, and fatty and greasy foods, which are known to cause discomfort, for a period of time.

"Later, individual food items are re-introduced one at a time to see if symptoms recur.

"Patients are advised to avoid foods that are definitely associated with the triggering of symptoms.

"Antispasmodic medication and low dose tricyclic antidepressants may be prescribed for pain and bloating; fibres and osmotic laxatives for constipation; and loperamide and diphenoxylate for diarrhoea."

Studies show that few patients with IBS subsequently develop organic disease.

However, IBS is a relapsing disorder with two-thirds of patients experiencing symptoms even after prolonged follow-up.

There is no medical therapy that has been proven to cure IBS.

"Nonetheless, the role of probiotics is becoming increasingly important now that gut microbiota is recognised as playing an important role in the pathogenesis of IBS and the gut-brain axis.

"More and more clinical and experimental evidence also show that IBS is a combination of irritable bowel and irritable brain."

In explaining the gut-brain axis, Prof Kew says: "It has been well established that bidirectional interaction pathways occur between the central nervous system, GI tract and enteric plexus (the gut's nervous system).

"Signals from the brain can affect motility, secretion, nutrient delivery and microbial balance in the gut.

"Similarly, visceral signs from the GI tract can have an impact on neurotransmitters, stress levels, mood and behaviour."

Counselling needed

Says IMU Healthcare clinical psychologist Puvessha Jegathisan: "Being a stress-sensitive disorder, IBS is triggered when the body undergoes stress, which in turn causes a fight-or-flight response.

"Enzymes and hormones are released, affecting the gut environment.

"There is a strong correlation between the severity of IBS and its co-morbid psychiatric disorders, depression and anxiety.

"Major life traumas were frequently reported 38 weeks prior to onset of IBS symptoms in patient studies.

"Co-morbidity of IBS and psychiatric disorder is approximately 40% to 60%.

"Social stigma continues to be the biggest hurdle that is preventing patients from seeking the psychological help they need.

"Most shy away from seeing a therapist for fear of being labelled crazy, feeble-minded or weak.

"There are yet others who do not know where to seek help."

She shares that treatment for IBS is often viewed and approached from a holistic biopsychosocial perspective.

This essentially means that counselling and psychotherapy is prescribed along with medication.

"The role of the clinical psychologist is to identify stress triggers so that solutions and direction can be offered to the patient to manage and prevent future episodes," she says.

Among the measures recommended to manage symptoms of stress are deep breathing, imagery and progressive muscle relaxation exercises, and cognitive-behavioural therapy (CBT), or mindfulness-based CBT.

In CBT, patients build insight into the relationship between situations and their thoughts, behaviours, physical reactions and emotions, and learn ways to catch and change unhelpful thinking patterns and behaviours that may contribute to physical or psychological distress.

This can, to some extent, help to prevent or control their symptoms.

Many people have the misconception that being in therapy equals costly, long-drawn gut-spilling sessions in the psychologist's office.

However, if indeed there is a mental or emotional issue that is not being properly addressed, patients may find that they are just treating their symptoms.

"The aim of psychotherapy is to ultimately wean the patient from being dependent on medication and therapy, so that she can function normally in society," says Puvessha.

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Balancing our internal bacteria

Gut microbiota

Recent advances in research have described the importance of gut microbiota in influencing interactions and biochemical signalling between the GI tract and central nervous system.

IMU Healthcare dietitian Kanimolli Arasu explains that host factors like genetic background, gender, age, specific disease or birth route, as well as environmental factors like diet, lifestyle, hygiene, medication and geography, affect gut microbiota.

"Early life exposure like vaginal delivery where the infant is exposed to maternal microbes; subsequent infant diet; antibiotics that result in selective killing of microbes; probiotics that result in selective enrichment; and the physical environment where an individual is exposed to environmental microbes, as well as subsequent adult lifestyle choices, have been known to impact upon gut microbiota.

"In the case of symbiosis, where a good balance of microbiota is achieved, an individual benefits from healthy metabolism, immune tolerance and intestinal homeostasis.

Constipation and diarrhoea, or a combination of the both, are common symptoms of IBS.

"When microbial imbalance occurs, a person may become pre-disposed to non-communicable diseases of the immune system, like asthma and multiple sclerosis, and intestinal disorders like necrotising enterocolitis and IBD," she says.

Prebiotics like fructooligosaccharides, galactooligosaccharides, inulin, isomaltulose and soluble corn fibre, support optimum gut function by promoting proliferation of normal bacterial flora and inhibiting the growth of disease-causing organisms.

These prebiotics can be found in foods like leeks, onions, garlic, Jerusalem artichokes, wheat bran, oats, legumes, soy beans, asparagus, corn and raw bananas.

The changes in the microbiota cause softer stools, increase stool frequency and reduce incidences of travellers' diarrhoea.

Meanwhile, probiotics, taken along with lots of water, are helpful in treating acute infectious diarrhoea in adults and children, and improves chronic constipation in children.

In IBS, probiotics appear to be beneficial in terms of improved clinical symptoms.

They can be found in foods like yoghurt, cheese, kefir, miso, kimchi, sauerkraut, tempeh and kombucha.

Kanimolli advises that for optimal gut health, it is best to combine prebiotic- and probiotic-rich foods for symbiotic effect.

"You could have yoghurt with banana slices, stir-fried asparagus with tempeh, and miso soup with cubes of tofu, for example.

"Consuming a variety of plant-based foods will confer the benefit of different fibres and nutrients for a more diverse microbiota," she says.

This article is courtesy of IMU Healthcare.