

Preventive Gastroenterology

By: Dr. Ajay Kumar and Dr. Manav Wadhawan

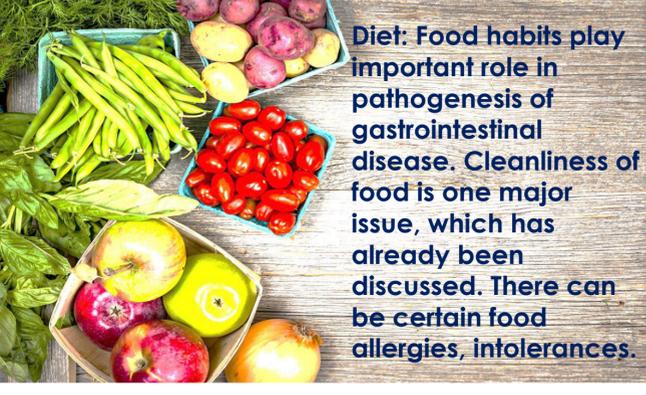


Gastroenterology and Liver diseases form a significant disease burden on the community. These contribute almost one third of patient load in any General practitioner practice. These diseases form a huge spectrum, starting from acute self-limiting diarrheas on one end to terminal cancers on the other. Large number of these could be functional, chronic, irritating mild diseases like irritable bowel syndrome, functional dyspepsia, constipation, while others can strike like bolt from blue and endanger life like acute liver failure, acute pancreatitis etc. These are also big contributors to overall mortality rates like infectious diarrhea in children, liver cirrhosis, cancer in adults. There could be diseases like acute pancreatitis which can drain the household budgets by causing long intensive care admissions or life long diseases like ulcerative colitis, Crohn's, diverticulosis, cirrhosis, chronic pancreatitis, carriers of Hepatitis B virus which cause immense pressure on the financial and mental health of individual, family and society at large.

As compared to other systems in body, large number of these are caused by infections, are self-inflicted like alcohol, smoking and life style aberrations. Even liver cancers are caused by virus and alcohol. These factors while scary, also offer an opportunity, as large number of these are preventable by taking preventive measures at individual and society level. State has important role to play in large number of these issues, as clean water and clean sewage are the cornerstone of preventing large number of these diseases.

As is clear from above that Gastroenterology comprises not only food pipe but also liver, gall bladder, pancreas which contribute to overall digestive system of body. I will try to address the issues of prevention by different types of intervention at different levels and briefly mention how and where it will have its effect.

LIFE STYLE CHANGES

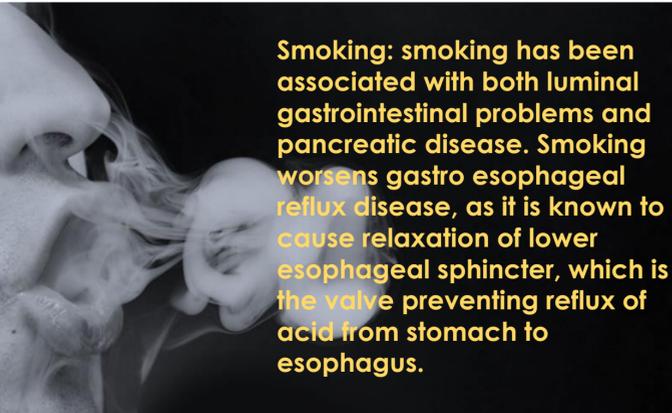


Diet: Food habits play important role in pathogenesis of gastrointestinal disease. Cleanliness of food is one major issue, which has already been discussed. There can be certain food allergies, intolerances.

i) Certain food allergies are well defined like wheat, milk, egg etc. Once these are diagnosed, best is to avoid these mushrooms etc. is also very common.

ii) Food intolerances are more common. Out of these milk intolerance is very common. If patient has lactose intolerance, best solution is to stay off milk but usually curd and cheese are well tolerated.

iii) Otherwise patients of most of the diseases like peptic ulcer, reflux esophagitis, dyspepsia need to follow a balanced diet. General advice is that small frequent meal; lighter dinner and adequate interval between meals and going to bed are good habits. In most of these disorders moderation in type of food is preferable and helpful. Excess of oily (deep fried foods), spices, tea, coffee, cola drinks, chocolates, candies etc. should be avoided.



Smoking: smoking has been associated with both luminal gastrointestinal problems and pancreatic disease. Smoking worsens gastro esophageal reflux disease, as it is known to cause relaxation of lower esophageal sphincter, which is the valve preventing reflux of acid from stomach to esophagus.

Also in patients of duodenal ulcer, smokers have decreased healing rates, increase recurrences and increased complications.

Earlier in patients of chronic pancreatitis, alcohol was considered to be main villain. Now there is definite evidence available that patients of chronic pancreatitis who continue to smoke, incidence of pain is more common than in those who do not smoke. Thus smoking has to be stopped along with alcohol in patients of chronic pancreatitis

Herbal drugs

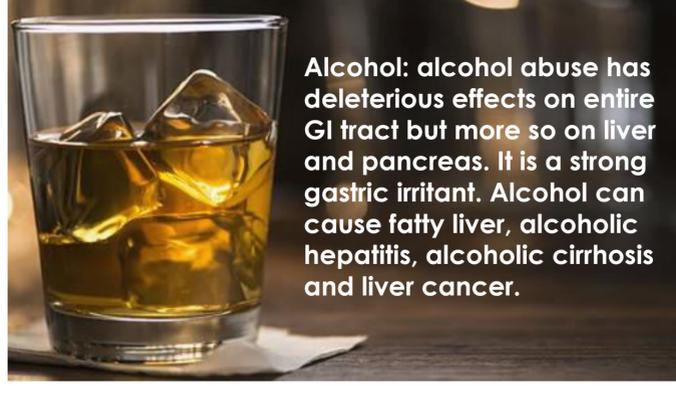


Certain herbal drugs contain heavy metals like lead, arsenic, mercury. Arsenic and lead are also used to adulterate opium, as it increases its weight. Long term toxicity can cause serious liver and kidney injury. Lead also causes severe abdominal pain and constipation. Other ways of getting poisoned by lead are exposure to paints.

Specific Vaccinations



Good prophylactic vaccines are available for certain infectious agents like Hepatitis A and Hepatitis B. India falls under intermediate prevalence category (about 2-3%). In most of such situations, spread is during perinatal period. It is recommended that all new born should be vaccinated for Hepatitis B, starting from time of birth. Vaccination is with three injections should be at time of birth, one month and six month of age. Due to logistical reasons, part of public policy it is advised to give three doses with DPT vaccine. Hepatitis A in childhood is benign diseases. It is not universally advised to give this vaccine to everyone. It is given in two injections. Those who want to take it, are given after age of two years.



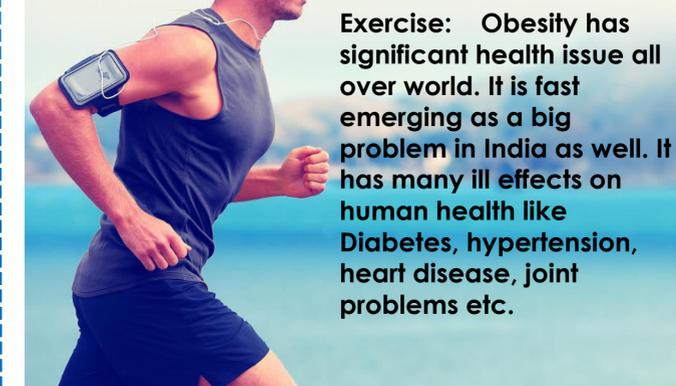
Alcohol: alcohol abuse has deleterious effects on entire GI tract but more so on liver and pancreas. It is a strong gastric irritant. Alcohol can cause fatty liver, alcoholic hepatitis, alcoholic cirrhosis and liver cancer.

There is no safe limit for alcohol. Patients who already have alcohol related liver disease or liver disease due to any other reason, alcohol causes further damage and even small amounts are harmful. Binges are more harmful. In general all perceptions that foreign liquor, taking good food after drinks saves liver beer is safe, taking some hepatoprotective agents along with it will save the liver have no scientific rationale.

Alcohol is responsible for another important gastrointestinal disease i.e. pancreatitis. Usually they will present with acute pancreatitis with severe pain. On stopping alcohol, disease progression gets slowed down, symptoms of pain are less but it does not guarantee full reversal of the disease.

It is important to reiterate that only solution to save ourselves from alcohol related disorders is to stay off alcohol, more so patients who already developed liver or pancreatic disease. If otherwise healthy individuals want to consume alcohol, it is better to be moderate.

Some people believe that upto 2 drinks a day, 14 drinks a week could be safe. One drink = 30ml hard liquor, 150ml wine, 330ml light beer.



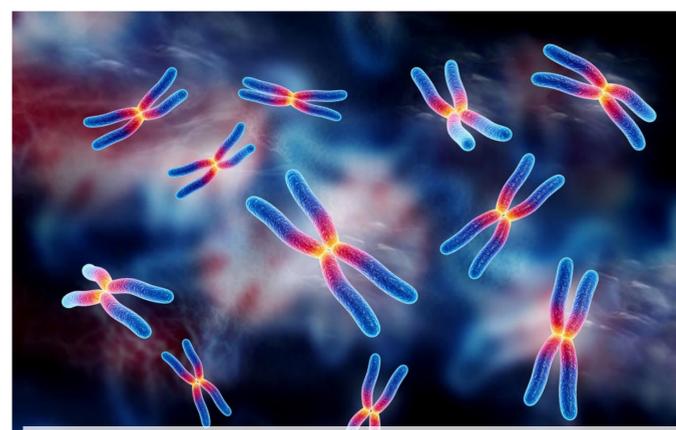
Exercise: Obesity has significant health issue all over world. It is fast emerging as a big problem in India as well. It has many ill effects on human health like Diabetes, hypertension, heart disease, joint problems etc.

Non-alcoholic steatohepatitis (NASH) has become the commonest cause of chronic liver disease in USA.

In India it is being recognized as another important cause of chronic liver disease. Usually it is part of metabolic syndrome. NASH can cause liver cirrhosis and if it is compounded by other factors like obesity, alcohol or any other hepatotoxic agent, it is all the more likely to cause liver damage. Today we do not have any single drug treatment for it. Best treatment is in form of life style changes i.e. exercise, diet control and to take care of compounding factors.

Thus it will suffice to say that regular physical exercise will help in keeping your liver healthy.

Genetic disorders



Certain diseases like colon cancer can be a part of a genetic disorder. Those who have family history of colon cancer, should undergo screening colonoscopy to pick up early lesions like adenomatous polyps. Once it is diagnosed, most of these polyps are removed through colonoscopy to prevent future colon cancer. In USA and European countries, where colonic polyps and cancers have a high prevalence, screening colonoscopy is recommended for everyone after the age of 50 years. This has shown over time to decrease the incidence of colon cancer. In India, as this diseases is less prevalent, it is not recommended for everyone. But who have family history, must undergo this.

To sum up, prevention is better than cure. Gastrointestinal diseases are common. Good thing is that as most of these are due to infections and life style aberrations, prevention is possible by both personal discipline and public health initiatives. At public health level, best is to provide safe water and sewage to public. At personal level, personal hygiene, health sex practices and life styles with specific vaccination, when available should be followed. For all this, it is very important to educate ourselves and public at large about these aspects.