Chapter 5
Constipation: More than Just "A Symptom"

5.1 The Uncomfortable Conversation

During my initial years of geriatric practice, I was wondering how a minor symptom like constipation can bother older adults so much. Perhaps, it is the most prevalent malady afflicting the elderly, yet it is a taboo subject. To talk of one's bowel movement is outside the etiquette of most societies. But, the combination of weak movement of bowel, effect of varied medications as well as stress makes constipation an embarrassing subject for the elderly.

"Dadu is very restless. He is withdrawn and quiet, he neither watches television, nor does he pursue his usual interest of reading books. His visits to the washroom have increased tremendously now to once every half hour as he tries to empty his bowel and get relaxed". This conversation happened in 2016 between Amita and I when she was discussing about her grandfather's miserable state over the phone on Independence Day.

She requested if I could pay a home visit to see her grandpa. Amita was my undergraduate batchmate from MBBS. After passing out from college, she started preparing for civil services and became an IPS officer and got posted as DCP, South Delhi. Their family set-up was a traditional one, and they were a living example of the joint family institution with four generations staying together and most of them being quite well settled.

So, I visited her grandpa that same evening. "Namaste, Sir!", I wished Amita's grandfather. Amita's grandpa knew me well as he had previously visited AIIMS for diseases like hypertension, diabetes mellitus and bronchial asthma. Also, with medications, everything was under control. After looking at me, he nodded his head. But, the warmth that one would feel with him around was missing; he was sitting in an easy chair with a grim face. Anyone could easily see that he was quite unhappy.

Amita's family had evolved around this gentleman, Mr. Kapoor, who was a statesman and a first-class civil servant having previously served as Secretary to the

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Government of India in the 1990s. Also, with my arrival, silence among each family member increased right from his elder son to the younger daughter-in-law.

In fact, except for Amita, no one dared to accompany me to his bedroom. Since her childhood, Amita had been very close to her grandfather. After her grandmother's demise a year ago, he had become even more dependent on Amita. I took a seat on a chair opposite to him as I wanted Mr. Kapoor to speak.

As a geriatrician, I was not surprised by his irritable disposition. But, of course, I was trying to reason about constipation's impact on a highly successful, intellectual old man. Here was a man who never stood second in any exam at school or in life and played an important role in solving complex problems of the nation in front of me today with his biggest worry being that he had not passed motion for a day, which was defined by him as constipation.

5.2 A Syndrome with Multifactorial Risk Factors

Constipation, a very subjective symptom of an individual, can be referred to as a condition that changes the bowel's functions such as reduced stool frequency, straining to defecate, hard stool, incomplete bowel emptying or inability to defecate [1]. Therefore, understanding the meaning of constipation from the patient is always useful. To help move the discussion forward, I initiated the discussion, "Sir, it would be great if you could explain me your actual problem". He simply replied, "I don't know".

Although the response was quick, it was underlined with unhappiness; his attitude was "Why was I nudging him when I knew the problem?"

I remained silent, and the old and heavy Crompton fan with its heavy blades continued rotating; its screeches filled the silent room. Mr. Kapoor had built this bungalow in 1970. Later, in 2010, it was renovated by his eldest son Yogesh who ensured a good mix of modern and traditional values of the family. Mr. Kapoor didn't allow even the ceiling fan to be changed let alone install a false ceiling. "I don't know what is happening to me, but I am unhappy with my life". Later, after almost 10 minutes of silence, "I have never felt like this", he responded to me while staring upwards at the dilapidated ceiling. Mr. Kapoor had continued his engage-

ment, postretirement, by working with multiple corporate houses as an advisor till he was 85. He then chose to reduce his mobility by reading, writing and consulting from home. He was a voracious reader with a collection of ~10,000 books in his home library. In fact, he had even begun penning his autobiography too.

Amita had mentioned that Mr. Kapoor had not passed motion since the day before and was restless, apathetic, and visiting the restroom frequently to clear his bowels. This had happened for the second time in the past month. From this brief conversation, it was clear how 1 day's incomplete passage of motion could have made his life utterly miserable.

Again, after a silence of 5 min, I floated a leading question, "Sir, I understand you have not passed motion for 1 day. Is there any strain in passing motion or sensation of incomplete evacuation or do you feel an obstruction in the path?"

With a lot of inertia and staring at me he spoke, "Nothing is coming out". He had an expression of complete helplessness.

I tried to understand from Amita about his last 2 days' food intake, particularly his fibre and fluid intake. Amita shook her head and mentioned that had almost nothing. She continued, "You know, Prasun, he was always a small eater throughout his life as he felt – 'his success mantra for healthy aging was eating less', but he has now restricted himself too much after the demise of my grandmother. Otherwise, he is quite disciplined and never skips his meals, except for one or two episodes like yesterday".

With further probing, Amita continued but with a softer tone. "His usual diet:- Two slices of bread with a cheese slice, one seasonal fruit and a glass of milk in his breakfast; lunch is a cup of rice, one roti and one cup of vegetables with some dal; and dinner is mostly soup, nothing else. In the evening, he likes to drink a cup of milk tea".

His approximate water intake was 1.5 l of water per day. She continued, "Actually a week back he lost his younger brother who had been staying in Germany with his son". While we were discussing these details, Mr. Kapoor was not very attentive towards it rather he was in a disguise. We also realized that the situation was not right to either nudge him further or explain to about constipation to him. Amita also signalled to me to come out of the bedroom. So, I said,

"Alright Sir I will prescribe some medicines, which I hope should solve the problem. It would be great if you can have some vegetables and fibers like one roti in the night. That will definitely help you to get rid of this problem".

He nodded with a deep exasperation, "Doctor I just don't feel like eating".

I sat with Amita in their living room. She asked, "What do you feel?"

I tried to explain that a probable cause of constipation in his case could be multifactorial (Table 5.1), including extreme ageing, multimorbidity, polypharmacy, iatrogenic (side effects of medicines), immobility and, of course, psychological stress. Furthermore, he had reduced his outdoor activity, which had precipitated the bowel problem too.

As a medical professional, Amita wanted a more elaborate explanation:

"Does ageing necessarily entail constipation? I had noticed the same situation in my grandma's case".

Table 5.1 Factors that lead to constipation

	Multiple factors which precipitate constipation
(a)	Extreme ageing
(b)	Multimorbidity
(c)	Polypharmacy
(d)	Iatrogenic (side effects of medicines)
(e)	Immobility
(f)	Psychological stress
(g)	Less intake of fluid
(h)	Less intake of fibre

So, to explain the link between ageing and constipation, I said, "Actually, bowel movement frequency decreases with aging because of reduced mobility, reduced fluid intake and dietary fiber, medical co-morbidities and related medications, all of which do impact colonic motility and transit".

Age-related decline in the external anal sphincter and pelvic muscle strength can contribute to difficulties in evacuation but were probably not the only cause for Mr. Kapoor's difficulty.

I noticed Mr. Kapoor was on amlodipine (10 mg) for blood pressure, calcium (500 mg) twice a day, and an iron capsule to ensure that haemoglobin should be more than 12 g/dl for him to remain healthy. He was also on Budecort and duolin-metered dose inhaler for his bronchial asthma and Urimax for his prostate problems.

So, I recommended increasing fibres in his diet. Her immediate response was filled with exasperation, "How can I increase fibers in his diet, when he is not eating properly at all?"

She continued, "As I mentioned, his appetite has substantially decreased after my grandma's demise. They were very attached to each other".

She insisted on a quick fix to the problem as he was very upset. I suggested, "Give him anything he likes with some change in the taste".

There have been studies that suggested individuals with non-ulcer dyspepsia (NUD) (less appetite, early satiety and belching), i.e., less motility of the upper food pipe, are prone to functional constipation. In fact, these two clinical conditions are linked by gastrointestinal hypo motility [2].

In fact, NUD is a widespread problem while ageing. Mostly a patient's caregiver and sometimes doctors confuse this diagnosis with gastroesophageal reflux disease (GERD), in which patients complain of burning sensation, nausea and decreased appetite. Thus, differentiating between these two diseases is important as their management is different.

Table 5.2 Functional constipation diagnostic criteria*

(a)	Straining for at least 25% of defecations
(b)	Lumpy or hard stools for at least 25% of defecations
(c)	Sensation of incomplete evacuation for at least 25% of defecations
(d)	Sensation of anorectal obstruction/blockage for at least 25% of defecations
(e)	Manual manoeuver to facilitate at least 25% of defecations (e.g., digital evacuation, support of pelvic floor)
(f)	Fewer than three defecations per week

Loose stools are rarely observed without the use of laxatives and insufficient criteria for irritable bowel syndrome

*Criteria should be fulfilled for the last 3 months with onset of symptoms for at least 6 months before diagnosis

The alarm signs that should be considered for upper GI organic problems such as GERD [3] are black tarry stool (mixed with blood), coffee-coloured vomiting and unintentional weight loss.

If the patient has any of these complaints, they must be evaluated via endoscopic evaluation of the upper gastrointestinal tract to exclude the ulcer disease or malignancy. In fact, the routine recommendation of pantoprazole or ranitidine should be discouraged and banned as an over-the-counter drug. A number of studies have suggested that pantoprazole and proton-pump inhibitors are overprescribed drugs. [4]

In Mr. Kapoor's case, he fulfilled the criteria to diagnose as functional constipation, which was aggravated with stress; however, the onset was acute.

Functional constipation diagnostic criteria should include two or more of the following (Table 5.2).

5.3 The Emotion of Motion

"How do you feel stress impairs bowel movement?" Amita asked apprehensively. Generally, chronic and sporadic stress disrupts regular bowel movements and contributes to constipation. The addition of fibre, fluids and laxatives to alleviate constipation makes it even worse and perpetuates stress further.

As I had some assignment to attend, I told Amita I will discuss more details later. For Mr. Kapoor, I prescribed Cremalax (two tabs of 5 mg) and Levosulpride (25 mg) to improve motility. Of course, I stopped all the offending drugs for some time like calcium, iron and amlodipine (known to cause constipation). I suggested some modifications to Mr. Kapoor's diet in the form of wheat bran-based roti. I considered this option based on the meta-analysis of 20 non-randomized studies of younger adults suffering from constipation who had benefitted from using wheat bran, which increased stool weight and decreased transit time [2].

"Do you feel it will be palatable to him?" Amita rightly asked. I cautioned her about the initial symptoms with usage of wheat bran-based roti such as increased bloating, flatulence and irregular bowel movements. So, you should start and gradu-

ally increase usage once the present symptoms are reduced. Finally, Mr. Kapoor felt better the next day after passing motion. He resumed his daily chores. He called me a week later and asked for an appointment at the hospital. It was a sunny day in August, after a prolonged rainy season in Delhi, at around 10 AM on a Saturday, which is comparatively a free day at the AIIMS hospital for me. I understood that he had several queries in his mind about constipation. To making an 84-year-old adult understand and explain about constipation is an uphill task.

I looked at him and started the uncomfortable discussion, "How are you, Sir?" Mr. Kapoor said, "I am fine now but really scared with the recurrent constipation-related episodes. Could you please explain why this happened so suddenly to me?" I continued, "Sir, with ageing there is decrease in bowel movement. So, it is not necessary to clear the bowel every day and passing motion a day to three days in a week may be normal". He responded with a very sharp and aggressive response. "Three days in a week? How can you say so? I used to clear my bowel every day for the last 84 years. Today, you are teaching me the theory of bowel movement? It is unacceptable. Sorry to say this. Lack of bowel movement hampers my quality of life and daily chores. I cannot explain the feeling, but I feel very bad when I cannot pass motion".

I was a little defensive but tried to explain to him, "I understand the problem that is bothering you a lot, but I must say that understanding this problem rather than fighting it will help you cope better".

I began my explanation by mentioning to him the basic anatomy of defecation. The colon (last part of our food pipe) has a well-established circadian rhythm with a significant increase in motility after meals and in morning when we wake up. There are intermittent high-amplitude (>100 mm Hg) prolonged duration propagating contractions (HAPCs) that sweep through the colon, which deliver the faecal material into the rectum, 3–10 times a day (Figs. 5.1 and 5.2).

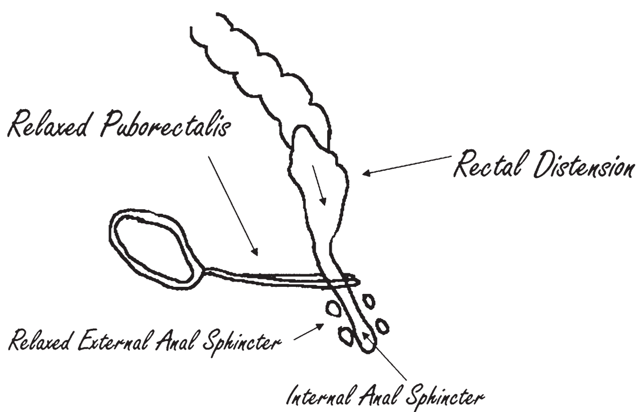

Fig. 5.1 Normal defecation

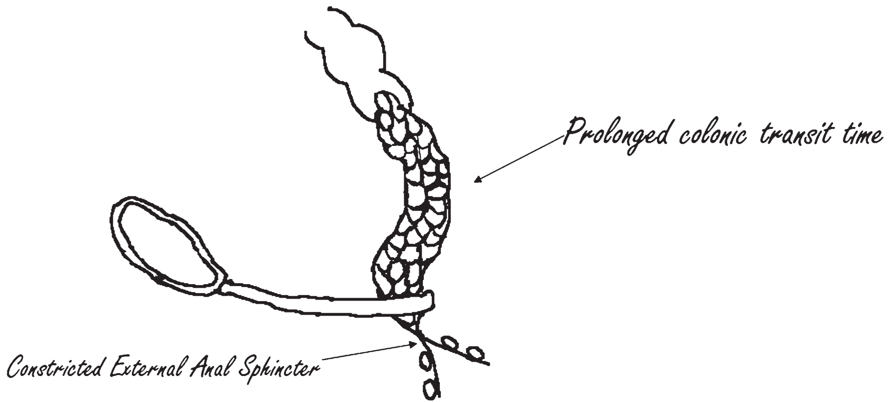

Fig. 5.2 Slow transit constipation

The number of HAPCs is significantly decreased or absent in patients that have slow transit constipation. The rectum acts as both a reservoir for stool and a pump for emptying stool. Once the faeces enter the rectum, there is a distension of the rectal wall and stretch receptor stimulation, which leads to stimulation of myenteric plexus. Motor signals smoothen the muscle cells of the descending and sigmoid colon and cause peristalsis. Peristalsis wave forces faeces towards rectum, leading to relaxation of anal sphincter and defecation.

So, Mr. Kapoor said, "OK, so any abnormality in any of this path or structure would cause problems with my bowel". I continued to explain to him about a few studies and results related to age-related alteration in structural systems:

1. There is altered colonic motility mediated by age-related neuronal loss and dysfunctional myenteric ganglia. The myenteric plexus is a major nerve supply to the GI tract and controls tract motility [5, 6].
2. Higher sensory thresholds for rectal distention suggest altered rectal sensitivity for the elderly.
3. There would be a decrease in HAPCs for the elderly [5, 6].
4. There is a delay in the colonic transit time, which may be secondary to modifiable causes such as medication side effects (i.e., narcotic and/or anticholinergics) [7].

Furthermore, scientists have shown age-related decreases have inhibitory junction potentials, suggesting a decrease in inhibitory nerves for the smooth muscle membrane. Bernard et al. [7] demonstrated selective age-related loss of neurons that expressed choline acetyltransferase, which was accompanied by sparing of nitric oxide-expressing neurons in the human colon.

Mr. Kapoor said, "In my case, every time it has been associated with some acute stress. So, is there any direct relationship with stress?"

Actually, bowel movement is primarily a subconscious process. Consciousness can only interrupt bowel movement that is already in progress; this may mean that you are suppressing the “emerging” urge to move bowels while under stress.

Sometimes, a low-level stress in certain older adults can suppress gastrocolic reflex—an unconscious action by the GI tract before a bowel movement [8, 9].

Studies have suggested that few personality traits (like neuroticism) are responsible for significant variation in stool consistency and frequency.

So, I continued, “Sir, those people who are anxious with every small random events are much higher (50% or even more) at risk of developing functional gastrointestinal disorder (FGD) such as constipation or non-ulcer dyspepsia” [10, 11]. A study by Chattat et al. showed that constipated patients had higher psychological distress compared to healthy subjects [12]. Also Nehra et al. found a significant proportion (>50%) of constipated patients suffered from multiple forms of psychological impairment such as anxiety or depression [13].

Furthermore, studies have mirrored previous results that anxiety, depression, panic, post-traumatic stress and somatization disorders frequently preceded or occurred simultaneously with FGD. Thus, according to this theory, a person who has a disproportionate response to anxiety-provoking situations and with difficult adaptation to stressful situations showed smoother muscle-related disorders such as functional bowel problems.

“Doctor, most personalities that you are describing are not of my type. I am very much capable of managing my stress”.

“In fact, stressful situations do not affect me at all”.

Mr. Kapoor was a man who rarely expressed his emotions. He did not express pain and distress even after the demise of his life partner after having spent 60 productive years of his life with her.

“Sir, to express your anguish and psychological pressure is not always wrong. Rather, it creates a barrier to expressing physical or psychological pain and reinforces the message (to self and others) that it is not okay to feel pain. Also, it might inadvertently communicate that cheerfulness or being contended is somehow the only acceptable form of feeling. This is troublesome as it can be an effective defense mechanism that works in the short-term but creates a constipating backlog of grief in the long-term” [14].

A discussion related to his problem only through one mechanism was difficult as constipation in older adults is almost always multifactorial.

So, to make it easier, instead of directly asking personal questions, I tried to explain the importance of balanced diet and negative effects of alcohol consumption and food with minimum refuge.

“Sir, alcohol dehydrates stools and suppresses intestinal peristalsis all at once, so it may precipitate constipation”.

Moreover, I tried to explain him that lack of exercise would probably make his bowel muscles weak, which are responsible for putting pressure in the lower gastrointestinal tract.

“Yes, Amita had informed me that you have mentioned about various age-related issues such as my regular dosage of drugs, which were precipitating constipation”.

So, what was my final diagnosis? Probably, it was slow transit constipation, defined as prolonged stool transit (>3 days) through the colon in which a patient experiences lack of urge to defecate and abdominal distension.

After listening to all of this, he laughed heartily with his artificial golden right molar being visible.

"I must say that you and Amita are controlling my life now".

"Let me inform you that I am walking regularly, have improved my diet in the form of more vegetables and water, and, most importantly, I have almost stopped alcohol intake".

He giggled, "After all, you know, I do not want to die of constipation".

"I want to complete my wish list"—"I would like to visit Europe using a cruise next year".

"Oh! That's Great Sir!"

Mr. Kapoor then left my clinic as some other patients were waiting. In fact, he offered me and my family to join him for the upcoming cruise.

Interestingly, he was doing well with the prokinetic drug Lesuride along with lifestyle modification and drug modification, both of which had helped improve his colonic transit time.

So, constipation in elderly people affects not only individuals themselves but also the whole family. Amita thanked me with a lot of gratitude for having relieved her dadu and the family from the stress.

5.4 Dismissive Attitude Towards Constipation of Physicians

Unfortunately, physicians have a dismissive attitude about constipation and do not consider it as a complicated problem, which forces patients to visit multiple doctors. Physician always look forward to resolving cardiac, respiratory issues or metabolic disorder rather than vague complaints like "Doctor, I am not clearing enough, not passing at all, etc" So, the journey of Mr. Abdul Gaffer, a 70-year-old farmer, was painful with his spouse Amina being a victim of such an attitude of doctors.

Mr. Gaffer had multiple medical issues like diabetes, hypertension and recurrent urinary infection because of a large prostate. He had been consulting a local physician in Jodhpur, Rajasthan. He could not stop his farming as it was necessary for their survival and they did not have anybody to look after them. So, the couple was helping each other survive. Amina used to stitch saris for which she used a powerful-looking set of eyeglasses.

"I had informed Dr. Ravish almost 6 months back about the irregularity of my bowel habit along with my other complaints like intermitted chest pain, fluctuation in the blood sugar, but he didn't give any importance to constipation", complained Mr. Gaffer. "He just added laxatives and advised me to take more vegetables in my food, which I was already having".

Initially, he had been prescribed a lactulose stimulant laxative. He had to have 20 ml of it at night, followed by Syp. Cremalax of a high dosage as suggested by the

doctor during his second visit. However, these medications did not provide any relief to Mr. Gaffar.

Appropriate understanding of usage of laxative is a must for all older adults, their family members and doctors. Generally, doctors prescribe laxative with a "try and see" approach rather than scientific evidence. This attitude of doctors paves the way for pharmaceutical companies to suggest products based on Ayurvedic, homoeopathic and naturopathic solutions and advertise them as one-stop solutions for all constipations, which misguides the customer too.

There are primarily four types of commonly prescribed laxatives available in the market without prescription:

1. **Bulk-forming** (fibre supplements) **laxatives** increase the bulk of stools by getting them to retain some liquid, which encourages the bowels to push them out. This is the only laxative that can be used safely by older adults if the cause of constipation is not known [15].
2. **Osmotic laxatives** soften the stool by increasing the amount of water secreted into the bowels, making them easier to pass, required to be taken for up to 2–3 days before they start their action. They should be used with caution in older adults and in patients that have renal impairment because of dehydration-related risks and electrolyte disturbances. They are fairly safe to take for long-lasting constipation but require a lot of water to overcome dehydration.
3. **Stimulant laxatives** act on the intestinal mucosa or nerve plexus by altering water and electrolyte secretions and stimulating peristaltic action. These are most powerful among laxatives and should be used with care. Prolonged use of stimulant laxatives can create drug dependence and damage the colon's haustral folds. This would then make a user less able to move faeces through the colon on their own, which is indicated by conditions such as slowing of the intestines (e.g., diabetic autonomic neuropathy), prolonged bed rest/hospitalization, use of constipating medications (e.g., narcotics) or irritable bowel syndrome [16].
4. **Stool softeners or emollient laxatives** are anionic surfactants that enable absorption of additional water and fats to be incorporated in the stool. This decreases the surface tension of stools, making it easier for them to move through the gastrointestinal tract. Softeners are ineffective for chronic constipation; however, they are useful for patients who have anal fissures or haemorrhoids [17].

"Why didn't you ask categorically about your bowel problems?"

"How can I? Doctor is so busy. He looks after ~200 patients per day. We did not know how to convince doctor about his symptoms"—Amina exclaimed and continued "*Hum gareeb aur unpaar logo ki bat kon sunega (After-all we are poor and illiterate, who will listen to us)*".

So, doctors who give just 2–3 min of time even to elderly patients with multiple complaints are unable to resolve issues. Of course, chest pain or fluctuation of blood sugar should get more weightage than constipation. But, the problems of constipation continued to increase on a daily basis. Mr. Gaffar had to stop farming; Amina was not getting any new order to stitch saris as she was already quite slow because

of her eye-related problems and finger pain because of rheumatoid arthritis. For survival, they had to sell a small property.

To get some relief, Amina took her husband to a hakeem (a herbal medicine practitioner). Although the doctor was not qualified from a well-renowned medical college, he was blessed with the power of healing. He gave an Ayurvedic powder, which had to be drunk with water before going to bed. It gave immense relief from constipation immediately in the morning.

“Inshaallah (God willing), I felt that I had recovered from my bowel problem”, Mr. Gaffer was elated as he could resume his work. He improved for a week. “But last to last Saturday on the day of Ramdan[1] in May 2017, one of his friend told him that he was looking very thin and whether he was suffering from any disease”.

Unfortunately, the symptoms reappeared the very next day, and he felt some pain in the rectal passage area.

I enquired and requested for details of any history that suggested passage of blood in the stool or coffee-coloured vomiting. But, there was just anaemia, subjective weight loss and acute onset alteration of bowel habit, in addition to his long-standing disease like high blood pressure and sugar.

After this, we immediately investigated Mr. Gaffer for any cancerous growth using colonoscopy. This was followed by a CT scan of the chest and abdomen to look for the primary disease’s spread to other organs. Based on the results, Mr. Gaffar was diagnosed with advance stage colon cancer, which had travelled beyond the colon to the surrounding lymph node and liver. His life expectancy was of a few months to year. In fact, the current survival rate for colon cancer (stage IV), according to the American Cancer Society, is 11%. A functionally stable patient who is a candidate for removal of liver metastases with colon surgery has 5-year survival rates of ~70%. In addition to stage of cancer, age, ethnicity, sex and differentiation of cancer cells matter a lot [18].

Are we not simplifying alteration of bowel habit to a large extent? Are we conscious about the economically weak and illiterate older adults who always are hesitant to express their complaints to doctors twice?

An elderly care physician must spend time to listen to every last complain with equal attention and understanding. Elderly care is never a simple, straightforward organ-specific problem with quick-fix solutions like treating organ-specific diseases in adults. Rather a mixed physio-psycho-social problem. So, physicians and gastroenterologists should have proper understanding about constipation and its management too.

Dr. Ravish had missed the diagnosis as he did not consider Mr. Gaffer’s every complaint, and Amina lost her life partner.

“He saved me from my uncle who abused me throughout my early childhood, taught me how to read in Urdu and imbibed positivity to have a productive life”.

After wiping her tears, she continued “Even I cannot see through my right eye because of age-related degeneration. With minimal vision in my left eye, I am

[1] It is considered to be a month full of blessings by Muslims. It is said that the gates of heaven are wide open and God forgives everyone with all his mercy.

unable to feed myself. All our savings have been consumed in his treatment. Now, I have nobody other than Allah".

There is no specified mechanism in our system to cater to widowed and bereaved elderly women like her. Discrimination based on caste, creed and religion in society, as well as old age homes, leaves people like Amina without hope. Clinician should not miss malignancy when there are alarming symptoms like unintentional weight loss, anaemia or bleeding per rectum and acute onset alteration of bowel habit. At the same time, overinvestigation with colonoscopy and CT scans should be discouraged.

Let me share an anecdote: Mr. Shakil Ahmed, a 67-year-old noted columnist who was suffering from difficult passage of motion for the last 20 years, had just visited a new gastroenterologist who immediately suggested CT enterography (scan of the abdomen) and colonoscopy.

Mr. Shakil met me after one of my public lectures, and when I asked him, "Is there any change in your bowel habit?" His response was "No". When I asked him about weight loss, he laughed and mentioned that he had gained weight and had been enjoying various parties and was frequently eating out.

5.5 A Comprehensive Approach to Constipation

There are a number of precipitating factors, and treating them with one medication or laxative is not a solution; it is rather harmful in the long run as it can make the patient dependent on the laxative. It is a common practice of general practitioners and even specialist doctors of gastroenterology to prescribe laxatives of various types for temporary relief rather than explaining the problem to the patient and managing it holistically. Ageing is a continuous process that changes in every organ system with the situation.

A number of times one drug or intervention works wonderfully, but then it fails to yield results. I have treated multiple patients like Mr. Kapoor with prokinetics, diet and lifestyle modification and have observed dramatic improvements in them. However, I do not know how many of them have been relieved of their problem in the long run.

Modifying lifestyle and transferring positive vibes to an elderly patient is very difficult, tedious and requires repeated reinforcement. Health education, among patients, caregivers and paramedical professionals and doctors themselves, is of utmost importance to discuss and discriminate age-related changes from age-related diseases.

When I ask my colleagues from gastro or geriatric medicine, medicine or any other discipline about cases related to bowel issues, their response usually is "Empathetic listening to an elderly about their bowel problem helps, but they want quick solution for their problems. Elders are not bothered much about the theory".

They are partially correct, but understanding and making them understand about their problem scientifically are helpful. Our post-graduation or even superspecialization curriculum in gastroenterology did not stress much on managing constipa-

tion in elderly population. This is very visible through most of the prescriptions that are issued in our regular, day-to-day practice.

Last year, during summer, I was sitting my OPD and saw a prescription. Mr. Dalbeer Singh, an 85-year-old gentleman, had attended the gastro OPD of a reputed corporate hospital with a predominant complaint of constipation. He had a sleep-related problem, and there was occasional instability in his gait, which was corroborated as ageing-related changes by the doctor. For constipation, he had been prescribed a fibre-rich diet, plenty of water and a stool softener (lactulose 30 ml) at night. The patient had been following the advice of his doctor religiously but failed to get any relief.

With proper evaluation, I realized that his instability, as well as his sleep problems and constipation, had increased. I diagnosed his case as that of idiopathic Parkinson's disease, manifesting as constipation and sleep-related problem, which were predominantly non-motor features but common in elderly. In Parkinsonism patients, constipation issues are generally of transit, so he probably was suffering from slow transit constipation. About 60% patients of Parkinsonism in the advanced stage develop pelvic dysynergy [2], meaning a lack of coordination between muscles of the rectum and the anal sphincter open mechanism. In fact, there is no role of the high-fibre laxative and osmotic laxative like lactulose. So, I started him on stimulant laxatives like Cremalax (5 ml) at night to start and medication for Parkinsonism. I also asked for rehabilitation by our physiotherapist, which includes balance training, gait training, managing bowel and speech therapy. He showed improvement after a month of therapy.

"Dr. Chatterjee, I am passing motion more frequently with a satisfactory amount, perhaps after a good couple of years. I am very happy that you have personally solved my problem of constipation, which was bothering me a lot".

His gait and balance had improved, he had started going to park to play cards with his peer group, and, most importantly, he no longer refused to attend marriage ceremonies and other functions. Constipation had restricted him from most of his social and spiritual domains of life. Thus, a holistic approach and early diagnosis had improved his overall quality of life.

A doctor and his team always are glad to hear any positive feedback from patients, especially, from an elderly one who is suffering from a progressive disease and constipation, which had led to a poor quality of life. But, I was unsure how long could we halt the disease and its associated complications.

Whenever I face a debilitating health issue of an elderly, I always try to clarify the limitations to my patients, as well as the problems that they could face in future on a positive note. So, I informed him after the routine consultation, "It is definitely a good sign that you have responded well to our intervention. But, it is very difficult to predict when one could develop significant constipation with the progression of the disease. We would do our best to maintain an excellent quality of life as long as possible".

He responded courageously, "Doctor I have lived my life. I am happy now and would not want to think what would happen next. I have put all my faith and belief in you and would continue to do so always".

Last week, he visited me after almost a year with almost no progression of the disease. In particular, the non-motor symptoms, bowel movement and sleep were fine.

So, obtaining appropriate history of bowel disturbance is important. It is also always helpful to give patients a long-term solution. Clearance of bowel is equivalent to a better quality of life for most senior people. We recently conducted a study in a community of ~600 elderly people in which we asked, "Do you have any difficulty in passing motion?" The participants were from an old age home, the OPD of AIIMS and a village. The results showed that ~27.87% of participants mentioned that they frequently had subjective complaints about their bowel movement.

5.6 Frailty, Immobility and Constipation in a Long-Term Care Facility

Managing constipation is very complex in frail elderly patients who have minimal mobility and very less motivation from the family and society. Last year, in December, I was on my usual morning round. Our junior resident introduced me to Mr. Ajit Kumar, a 76-year-old gentleman from bed no. 22 at AIIMS. He was staying at Devi Lal old age home in Sector 21, Faridabad, and had been admitted to AIIMS with high-grade fever and abdominal pain and was in a delirious state. The old age home is run by Mr. Devi Lal, an 80-year-old gentleman who had dedicated his apartment, comprising six rooms to shelter the elderly. The room's size would be ~16 ft × 12 ft with each room occupied by 6–7 residents.

Mr. Devi Lal informed me on one occasion when we had conducted a free health check-up camp at his old age home, "Stay and food is free. Anybody can come and stay as long as there is a vacancy. At present, we have 42 residents, of which 60% are male. However, only 10% of the residents are able to pay through their pension".

"How do you run the old age home? How do you feed them?"

"Son I have earned a lot from my business throughout my life. Now, it is time to give back to the society. My son and daughter with their family are settled abroad, so I and my wife Ms. Rani are trying to help the helpless, lonely or rejected and dejected peer group of our generation". There was a sense of helplessness and complaint toward the next generation though.

I enquired, "What about their health care, it must be expensive to take care of all the inmates?"

"Sorry, I can't afford more than that. Few residents have their pension and they visit monthly or three monthly once to their respective physicians. Those residents who are demented, our attendants provide them with food. But, the group of really frail elderly residents simply is lying on their bed, Aise hi pare rehte hai (just simply lying in their bed), with the attendants helping them to go to the loo".

Most old age homes are created out of emotion to help older adults, who have been rejected by the family or society, in good faith. But, there is no standardized

care as they do not intend to provide active ageing but sustain life mostly with no quality of life. In case of emergency, the residents visit the nearest government hospital, while complicated cases come to AIIMS. So, Mr. Ajitji was brought to AIIMS with the help of HelpAge India (NGO). He had moderate-to-severe forgetfulness, so he could not explain to us much about his physical problems. Our junior resident, Dr. Anita Siegel, had obtained detailed history from his temporary care-provider, Jessica, from HelpAge India. But, there was no first-hand information from everyday observers of the old age home. This type of issue is very common among older adults who have a urinary tract infection or colon infection, considering the hygiene of that old age home. I asked Dr. Anita about his bowel movement, but she could not answer. However, his regular urine was devoid of pus cells, which ruled out urinary infection. Only on the fourth day of admission Mr. Apurvaji, one of his room partners at the old age home who came to visit him, informed us that he had not passed motion for the last couple of days (~10 days); however, there was small amount of liquid passing through the rectum. His fever was not responding to antibiotics, although we were infusing him with antibiotics and fluids.

"How are you today, Sir?" When I asked this question, he tried to explain to me through a gesture that he was not doing well and that he was probably (I am) going to die. He said this while caressing his abdomen. However, Apurvaji had given us a clue, so we did an abdominal X-ray. We found that there was a dilation in the colon. So, I instructed my senior resident to perform a colorectal examination. We found that it was loaded with stool. So, we gave him enema, but it did not have any effect. It took us 5 days of enema, which was administered twice a day, to clear the bowels and provide relief to the patient. So, Ajitji survived on this occasion, but we learned how even constipation can cause a sepsis-like grave situation. The diagnosis was faecal impaction in frail population. This issue is prevalent in nursing homes in developed countries or in long-term care facilities of any form, but it may remain undiagnosed for a long time [19].

A faecal impaction is a large, hard mass of stool that gets stuck in the colon or rectum and is difficult to push out. This problem can be very severe and cause grave illness or even death if it is not treated. It is more common among older adults who have chronic constipation and suffer from immobility [20].

5.7 Dealing with Constipation as an End-of-Life Issue

"I do not know if it was sheer neglect or lack of training", Mira was reminiscing about the last few days of her father. I was a little surprised by her statement. I asked Mira to elaborate further in detail.

"My father was suffering from acute myeloid leukemia (AML; it is a form of blood cancer) and was under treatment of a doctor at a reputed tertiary care hospital. He was put through the regular cancer treatment protocol starting from chemotherapy. With God's grace he responded positively and went under remission for six months. After a flu, he developed a severe chest infection that eventually led to

multi-organ failure. All of this happened in a span of 4–5 days. We had him rushed to a private hospital but after a week of therapy, the doctor said that nothing much could be done. His other organs were reviving but his lungs were not responding. He was not able to maintain adequate oxygen saturation".

Mira recounted her father's ordeal in a single breath. In fact, she had been taking care of her father on her own for an entire year. She was a young professor at an undergraduate college and a research scholar at a reputed university in New Delhi. She found it difficult to cope with the situation, although most resources were at her disposal.

After a heavy pause, Mira resumed, "He was a pragmatic man. He knew his diagnosis. So, he told us not to intubate for ventilator support. Unlike so many other terminal stages of life, he was fully conscious. Yet, his only complaint was that he was unable to pass motion for a week after being admitted. They had tried with enema for three consecutive days".

There is always a sense of helplessness for doctors whenever they deal with a patient suffering from terminal cancer or any other end-stage disease. Once they realize the limitations of medical sciences, they lose interest in the patient. It reduces the doctor-patient interaction time too [21]. The medical team either tries to discharge the patient or starts wishing away problems like constipation. Mira continued, "Nobody was sincere enough to analyze my father's problem. He was desperate to pass motion, even resorting to home remedies like intake of dried figs. I had asked almost every attending doctor and nurse for help. But, they dismissed his inability to pass motion as something that will get resolved by itself with time. I felt utterly helpless and unable to provide respite to my father from something so insignificant. How could health professionals be so dismissive? I wondered then. Our whole family prayed for relief—not to free him from pain but to pass motion. I came to know from the internet that digital rectal evacuation could be an option when the patient is unable to push himself because of the weakness of the anal sphincter. With some doubt and hesitation, I requested the treating doctors and attending nurses to exercise the procedure if possible. But, everyone simply transferred the responsibility to others.

Dad was asking for homoeopathic and natural remedies. We were helpless. As per his wish, the doctor had removed the ryles (feeding) tube and catheter, but he was unable to breathe without four liters oxygen support". "I will die without clearing my bowels", said Papa through gestures. "We were extremely upset with the approach of the hospital's medical team. Eventually we shifted dad to a smaller hospital for basic palliative care. Unlike a well-equipped hospital, this one was managed by few young but energetic nurses. A doctor used to visit it once on a daily basis. The on-duty nurse helped to remove the stool same day with digital evacuation. It was his last smile after have passed motion, and he thanked the on-duty nurse profusely and even equated her to God".

Mira's father's case is an insight into how managing end-of-life issues is equally challenging like managing cancer or any other incurable diseases. Constipation in older adults is much more than just a symptom. It impairs both the quality of life of an individual and affects the whole family too. Older adults may explain this as

"decrease frequency", "inadequate motion", "difficult to pass" or "complete absence of motion". Age-related decrease in peristalsis, dysrhythmic contraction and increased transit time, all of these aspects can be underlying mechanism for constipation. Personality, capacity to manage stress, anxiety and disorders are related with functional bowel disorder in both the young and the old, whereas Parkinson's disease, dementia and frailty are the leading causes of constipation in the elderly patients staying at long-term care facilities. I often discuss with my older clients that physical exercise of any form helps to improve the motility of the food pipe; yoga, meditation and meaningful societal engagement would indirectly help by relieving anxiety. Doctors treating older adults irrespective of their discipline should be more sensitized about constipation-related problems. The approach should be more sensible and holistic with adequate consideration given to multiple factors that can involve, contribute or precipitate constipation rather than simply rejecting or ignoring symptoms as merely age-related problems. Relevant understanding for both the patient and the doctor would always lead to a sensible solution. Constipation is a complex but a very real and widespread problem for end-of-life care. Empathy, understanding of problems of patients and addressing them to provide a peaceful and a dignified death should be taught in both undergraduate and postgraduate curriculum of medical professionals. Let's recollect, a dismissive attitude or avoidance of constipation-related symptoms is not in accordance with medical ethics.

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