



Editorial

'CONSTIPATION IN CHILDREN' – THINK TWICE BEFORE STARTING TREATMENT



Constipation is a common gastrointestinal problem in children for which parents bring their child to a doctor. It is often characterized by infrequent bowel movements or hard, dry stools. Sometimes child holds bowel for 2 to 3, even 10 to 15 days without any significant

physical change. Various factors can lead to constipation in children. Common culprits include faulty early toilet training and changes in diet. Fortunately, most cases of constipation in children are temporary. Encouraging the child to make simple dietary changes, such as eating more fiber-rich fruits and vegetables and drinking more fluids can go a long way toward alleviating constipation. Usually paediatricians deal with constipation by giving such advice and adding laxatives. But they subsequently have to refer the baby to a Paediatric Surgeon when it does not get cured by the first line methods of treatment. Then it becomes the duty of the surgeon to act properly for its cure.

As a matter of fact, the prognosis of constipation, especially the chronic constipations depends on its causes. Most of the times, it is a secondary one due to faulty toilet training and anal fissure. A very small number of children have surgical conditions like Hirschsprung's disease (HPD), anal stenosis etc though other medical causes like Hypothyroidism, Cystic fibrosis etc can result constipation. However, the real dilemma occurs for diagnosing constipation due to HPD and due to chronic habitual constipation or anal fissure. The problem arises when the exact cause of constipation could not be elicited. It might be due to poor history taken by the doctors or given

by the parents; ignoring the common clinical features of a disease like sentinel piles in anal fissure; bizarre history of constipation due to very 'short' or 'Ultra short' segment HPD. As a result, simple anal fissures could be treated by difficult Rectal Pull through operations or difficult cases like HPD could be treated conservatively as a case of anal fissure without result.

The history of passage of meconium in neonatal period is a very good means to diagnose HPD. A delayed passage of meconium after 48 hours of birth or an assisted passage of meconium by Glycerin suppositories is very important. If it happens, most probably constipation is due to short segment (or Ultra short segment) HPD. But if any child passed meconium by itself in due time and had normal bowel habit, which develops constipation afterwards, the cause is almost surely not due to HPD. Unfortunately, a lot of attending doctors could not take the exact history of first passage of meconium. It is mostly due to the absence of the mother during the first visit to doctor. Sometimes mothers who were detached from the babies after birth especially after Cesarean section can not give correct information. However inattentiveness of physicians due to any reason might also be responsible.

A good daily bowel history of the baby is also important to find out the reason of constipation. If the baby passes stool daily but it hurts during the passage, it seems to be due to anal fissure. Sometimes they pass stool after several days' intervals with rectal bleeding and no abdominal distension as they are able to pass flatus. In HPD rectal bleeding is almost absent but children present with abdominal distension as they fail to pass both flatus and feces. So, one can rule out HPD from the history of rectal bleeding and absence of abdominal distension.

Digital Rectal Examination (DRE) has a very important role in diagnosis. It should be done in every cases of

constipation. Though it is thought that DRE is contraindicated in painful condition like anal fissure, which is not correct in case of children. It is said that, contraindication of doing DRE in children are – (i) If the child has no anus or, (ii) if the doctor has no finger! So, DRE should be done in all cases as it gives important information. If the anal sphincter is found in spasm, the diagnosis should be anal fissure. On the other hand, it will be normal in HPD and the rectal wall will grip the examining finger. A 'sentinel piles' seen during DRE is pathognomic of Fissure in ano. It is an exuberant tissue over any fissure in ano situated in either 12 O'clock or 6 O'clock positions of anal verge. It never occurs in constipation due to HPD. So, presence of Sentinel piles in a constipated child could exclude HPD.

From the above discussion, it is quite understood that the difference between HPD and Anal fissure or other constipations could be differentiated by a good history as well as a good clinical examination. Still to support all these, especially a HPD, we need to do some investigations. However, the investigations themselves have limitations. If not properly done or interpreted, instead of helping in diagnosis, they might create confusion.

The commonest investigation usually done to diagnose a HPD is a 'Barium enema X ray'. It is a very troublesome procedure, especially for children. But if properly done and reported, it helps. Unfortunately, we have seen many radiologists can not help the paediatric surgeons in the way what they require. The coning of lower rectum, Recto Sigmoid index etc. which are present in HPD are seldom properly addressed. Though it is known to all that a 24 hour late film in a Barium enema x - ray gives information about HPD only in neonates, it is almost routinely done unnecessarily in older children also. In case of neonates, retention of Barium within the colon more than 24 hours goes in favor to the HPD. But in simple constipation due to any cause in older children, the barium might be retained within colon. But the concern personals often label it as a case of HPD, which actually is not true. Many times the differences between 'Primary' & 'Secondary' mega colons are often omitted. Moreover, some unnecessary irrelevant parameters are reported, which actually instead of helping, confuses. The modern parents are educated and often very sensitive. They keenly notice all investigation reports before the doctors see them. So, if the report says anything different than surgeons' opinion, they become confused.

Though a Rectal Biopsy is called as the 'Gold Standard' for diagnosing HPD, it is sometimes not properly used. In fact, doing rectal biopsy is a very

tricky job. The accuracy of result in rectal biopsy is 99% but, error can occur. It needs an expert surgeon to take sample and a very expert pathologist, who has vast experience and knowledge in this field to interpret. We notice a very few histopathologists in our country who can confidently diagnose HPD from a rectal biopsy. The normal anus has an absence of ganglion cells at the level of the internal sphincter, then a physiological level of hypoganglionosis in all age group at about 9 to 10 mm above the dentate line. So, a rectal biopsy (Punch or full thickness) should be taken from an exact site, about 2 cm above the anal valve. . If it is taken from a lower site, ganglion cells might be found absent, which might be physiological. However, in that case hypertrophic nerve fibers will be absent. Now a day, it has been showed that the level of physiological aganglionosis might vary proximally in the walls of rectum. Moreover, most of the pathologists feel comfortable to report from a full thickness rectal biopsy rather than a punch biopsy. They are comfortable in finding the target cells within the Myenteric plexuses. In that case, if a biopsy is not properly taken in full thickness, a request for repeat biopsy might come from the laboratory stating that the surgeon has sent inadequate material. It should be remembered that the diagnosis of HPD in histology is not only the absence of ganglion cells. Presence of Hypertrophic nerve fibers is also as important for a complete diagnosis. Unfortunately, this correlation of absence of ganglion cells and presence of hypertrophic nerve fibers are infrequently seen in the rectal biopsy reports. The disturbing thing is that, there is tendency in some surgeons to proceed to quick surgery on the basis of these incomplete reports labeling it as 'biopsy proven HPD'. It will be honest for a surgeon to seek a review report from the pathologist in this regards because, a rectal pull through surgery has high morbidity as it alters the anatomy of the pelvic organs of the affected children.

Treating constipation in children is not a simple job as it apparently seems to be. It needs lots of knowledge, experience & patience. The proper cause must be elicited first from the history, clinical examination and laboratory investigations with extreme care and then one should proceed for treatment. Otherwise the complaints will persist as before, no matter how many and how big surgeries are done. So think twice before you start treatment.

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