Post-operative Abdominal Adhesions in General Practice — Dr BA Michaelides

Summary
The incidence of adhesions and their symptoms will rise with the increase in the incidence of caesarian sections and hysterectomies. Are these fine adhesions causing abdominal pain, or is it just a convenient peg on which to hang symptoms? GPs have to decide what is best for their patient: an operation or not.


KEYWORDS:
Adhesions, Laparotomy, Physicians, Family

As the incidence of caesarian section and hysterectomies seems to be rising, so the incidence of adhesions and their symptoms will also rise. In one study of pelvic pain by laparoscopy, 38% had adhesions as a cause. Adhesions in the abdominal cavity are the physiological response of the omentum and the epiploic appendices to seal off infections. Adhesions also result from damage due to surgical trauma and haemorrhage. Fibrinous exudation is the necessary precursor to fibrous organisation within the peritoneal cavity. The adhesions may vary from thick fibrous bands to delicate strands of tissue.

We all know that these adhesions are a surgeon’s nightmare at laparotomy and they can cause acute intestinal obstruction. Most doctors have diagnosed these acute emergencies and assisted at the operations. The contentious issue is whether these fine adhesions cause abdominal pain and symptoms. “I believe it to be a poorly substantiated myth that adhesions can cause abdominal pelvic pain.”

General practitioners today are faced with a dilemma: Do these adhesions cause symptoms, and if they do, is it worthwhile to do a laparotomy to free the adhesions? Are adhesions a convenient peg on which the neurotic can hang his symptoms?

We are often regaled with stories of how, after laparotomy and freeing a few paltry adhesions, the patient was cured. Was this a placebo effect or did the adhesions cause the symptoms? If a thick fibrous band causes the severe symptoms of acute intestinal obstruction, why should lesser bands not cause milder symptoms? Must we wait for the full-blown picture of obstruction before we act?

The presence of adhesions alters the gastrointestinal motility of the bowel. The loop caused by adhesions raises the intramural pressure of the small bowel or colon, and then later, with resistance, there is decompensation with symptoms related to pressure and filling. “Adhesions that restrict or cause limitation of movement or distensibility of a pelvic organ are more likely to cause pelvic pain than those adhesions that do not.”

What is the common picture? It, unfortunately, is usually a middle-aged female with all the other addendit menstrual complaints to obfuscate us. There is a story of either caesarian section, hysterectomy, ovariectomy, or even cholecystectomy and, less common, other surgical procedures. It is notable that she needs only one scar, especially if it is below the umbilicus.
The common story is one of vague abdominal discomfort, colic, winds, distension, dyspepsia, reflux, constipation and even bladder symptoms, as well as attacks of diarrhoea. This condition can mimic any disease which alters gastrointestinal motility, either inflammatory, neo-plastic or functional. It is a diagnosis by exclusion.

These adhesions are the surgeon’s nightmare

The Differential Diagnosis

1. Spastic colon
2. Diverticulitis, Crohn’s Disease and Ulcerative Colitis, Gall Stones, Lactose intolerance
3. Duodenal and gastric ulcer, Pancreatitis or non benign disease of the bowel

Investigations entail:

1. FBC and ESR
2. Occult blood
3. Straight X-ray abdomen; and here one must ask the Radiologist to comment on the faeces present in the large bowel; whether he thinks it is abnormally loaded or impacted. The presence of solid faeces in the caecum and right colon is an indication of arrested motility.
4. Barium enema

... Abdominal Adhesions

5. Colonoscopy is essential; and here the experienced colonoscopist can be a great help as he has a three-dimensional view of the bowel.

Often great difficulty in diagnosis is its similarity of symptoms to those of spastic colon. Here we can try a therapeutic trial of a high-fibre diet and Fibogel orange, which is a soluble fibre. This will help the spastic colon sufferer but not the person suffering from adhesions.

If a diagnosis is reasonably confidently made, what can one offer the patient? The foremost is dietary advice, and a dietician is of paramount importance as there is a long list of foods which must be avoided. However, simple rules such as ‘no pips, no skins’ and ‘if you can’t cut it with a fork, you can’t eat it’ are invaluable. Small, frequent meals are an essential ingredient in this new lifestyle and further advice is sought from the dietician.

The second principle is never to allow such a patient to become constipated. Remember that their diet does not have the roughage of the spastic colon diet. Begin with a sloppy diet and slowly introduce dietary fibre in stages, but not the indigestible fibre found in cellulose or fatty meat fibres. Drugs such as antispasmodics should not be used as they disguise the bowel’s attempt to overcome the segmental filling of the colon.

Instead, use stool softening laxatives such as Millypar, in the early stages, until some fibre is introduced. The aim is to keep the stool formed but of a spongy consistency. Royal fibre is an insoluble fibre; it retains the water in the fibre and the stool stays soft and spongy.

If, despite the above measures, the patient is frequently in the consulting rooms, or presents with sub-acute attacks of obstruction necessitating drips and hospitalisation, laparoscopy or laparotomy must be tried. The reason for laparoscopy/laparotomy is two-fold: it can be diagnostic and curative. I remember two patients I had last year, who were diagnosed as adhesion sufferers by competent doctors. At laparotomy, one had a CA colon and the other a missed appendix.

Often at laparotomy the so-called minor adhesions are divided, with excellent results. A case illustrating this is Ms PD, divorcee, aged 48, with a previous history of appendicectomy, surgery for ectopic pregnancy, hysterectomy, then later, ovariectomy. She presented with colicky pain in the left iliac fossa, off and on for six months. The pain became worse and she was hospitalised with a sub-acute obstruction, and was given a drip, and she settled down. However, the pain in the LIF returned, and at laparotomy a month later, a number of adhesions in the pelvis were freed, and in the patient’s words, “this
operation was a great success.” If this is a placebo effect then it is worthwhile, as these are grateful patients.

Will they get further adhesions in the future? It is likely. A case illustrating this is that of a 65-year old, married woman, who had had five previous abdominal operations, viz., hysterectomy, two ovarian operations, and two operations to her bladder. She was operated on for small bowel and sigmoid colon adhesions causing obstruction; but after three months post-op she again developed symptoms of adhesions. This is where the help of the dietician is invaluable. This patient has been given a suitable low residue, low fibre diet, and provided she keeps to the diet, she is fine but she has moderate discomfort if she transgresses.

People who are prone to keloids are more likely to develop adhesions. There are some patients with dense adhesions at operation, where surgical intervention is foolhardy and dangerous.

There is an operation for a large floppy colon, which looks tissue thin, in the severely constipated person. These patients are advised to have a total colectomy, but this is very radical treatment.

In conclusion, it must be stressed that the general practitioner plays a pivotal role in this dilemma and decision making. These patients must not be written off as neurotics and the family doctor has to advise, empathise, restrain over eager surgeons, or even twist the arms of reluctant surgeons, because in the end it is the general practitioner who knows what is best for his patient.

References