Parastomal hernia battle of the bulge

Parastomal hemia is a common complication associated with stoma surgery, leaving the surgeon with surgical dilemmas, the stoma nurse with practical solutions to solve and the ostomist with the stress of disguising its visibility from beneath their clothing as they battle the bulge.

This article aims to discuss the plight of the ostomist with a parastomal hemia by exploring the reasons for hemiation, the signs and symptoms related to hemias, the surgical management and the dilemmas that may ensue whilst considering suitable stoma management A parastomal hemia is described as "an abnormal amount of intestine in the subcutaneous or intestinal tissues causing a swelling or bulge". It may occur with any stoma but is more common in end colostomies. Initially a slight, painless swelling develops causing little or no management difficulties for the ostomist. However, this swelling has the potential to get larger and as it does, it also brings about many other associated complications.



When the parastomal hemia becomes large, the pressure of the bowel protruding through the abdominal wall causes much discomfort, which is often described as a dragging sensation. This is further complicated with changes in the size and shape of the stoma, the skin around the stoma may become fragile and uneven giving rise to skin problems, consequently posing difficulties with everyday activities.

It is widely acknowledge that a parastomal hernia is a late complication of stoma surgery. The incidence of herniation varies throughout medical literature but it mostly states that at least 20 – 30% of colostomists are likely to be troubled by a hernia whereas the incidence is less for the ileostomist and urostomist.

The main reason for the development of a parastomal hemia is assumed to be weakness in the abdominal wall at the site of the stoma but this is not always the case. Other contributory factors thought to lead to the development of a parastomal hernia include obesity, malnutrition, chronic cough, sneezing and straining in constipation; all of which may increase pressure on the abdominal wall. There has been much debate amongst surgeons as to how the stoma is initially constructed. If a defect arises in the construction of the stoma, the potential of a hemia occurring increases. One of the main theories is that the stoma should be placed within the rectus muscle of the abdomen (See Fig. 1), as this muscle will act as a support to the bowel but further debate arises with which route the bowel should take prior to being pulled through this muscle. Some surgeons feel that it is unnecessary to position the stoma through the rectus muscle particularly as with age the rectus muscle becomes thinner and weaker and therefore not able to provide adequate support to the stoma and that this is more common in women. A defect in the ostomists' skin collagen may also play a part although there is no study to support this view.

Preferred treatment or management of parastomal hernias is non-surgical however extreme cases will require surgery. Surgeons are reluctant to surgically repair parastomal hernias as there is a 50% recurrence rate following any surgical intervention particularly when a local repair has been undertaken. This is when the dilemmas begin for the ostomist and the nurse specialist as attempts are made to manage the hernia conservatively, resulting in some ostomists wearing support garments such as a girdle or belt

From my own clinical experience ostomists with parastomal hernias, not only become distressed due to the unsightly bulge or swelling that develops but many express difficulties managing their stomas. As the parastomal hemia enlarges the stoma function becomes progressively more unpredictable. Many are extremely embarrassed as wind (flatus) seems to increase and becomes more noticeable, whilst the output appears to fluctuate between sluggish (small pellets) to explosive (diarrhoea) making appliance fitting extremely difficult. Some ostomists have expressed difficulties when buying suitable clothing, as they often feel lopsided and would have to opt for a larger size.

As the stoma nurse makes her assessment of individual cases ostomists not only require advice in order to support the parastomal hernia but also require advice as to how to manage a dysfunctional stoma. When managing the appliance, a one-piece system would be considered better than a two-piece system as it is less bulky. Of the onepiece appliances available it is recommended to use a large circular or oval shaped adhesive or a product with two adhesives so that the appliance will have an opportunity to stick better. However these are not always suitable for the individual

because an appliance with a large adhesive area usually comes with a large bag, which is not everyone's choice.

Whilst assessing the stoma function it may be necessary to consider the dietary habits of the ostomist. Taking a dietary history could help identify the dysfunctional problems, amount of fibre and type of food eaten. Sometimes fibre can lead to a blockage, resulting in further pain and discomfort but it also has a role in thickening the stoma output. Therefore it might be necessary to keep a diet diary for a time in order for the stoma nurse to make an assessment with regards an individual's dietary intake.

The mainstay management for parastomal hemia is that of a girdle or belt. There are several types available however the individual must be measured and fitted appropriately prior to use. Up until recently most girdles and support belts would come with a reinforced hole for the stoma and appliance to be fitted through. Reports now show that a hole in the corset or belt is unnecessary, as it will only exacerbate the very problem it seeks to correct. Some stoma nurses feel that without the hole in the girdle or belt the stoma output is unable to flow freely thus leading to 'pancaking' where the faeces does not fall to the bottom of the appliance.

Currently preventative measures are being explored, suggesting those at high risk of hernia development be assessed and offered preventative management such as a support garment, dietary advice and advice on re-establishing activities such as lifting and playing sport. Current research is also exploring whether it is appropriate for all ostomists with newly formed stomas to undertake abdominal exercises in order to strengthen abdominal muscles and thus prevent hernias occurring in the first place.

Tidings Contributor

Julia Williams Lecturer in Gastrointestinal Nursing The Burdett Institute of Gastrointestinal Nursing in partnership with Kings College London and St. Mark's Hospital, Harrow

