

# Pseudo-Obstruction Decompression Using a Heald Anal Stent

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**Abstract:** The effective and maintained decompression of pseudo-obstruction using the novel approach of a Heald anal stent is described. The Heald stent was placed trans-anally without the need for an anaesthetic, reducing luminal pressure allowing both initial decompression and maintenance of decompression of the rectum. This allowed the patient with significant medical co-morbidities to be discharged after a week without the need for operative intervention and thus reducing considerable patient risk.

**Keywords:** Pseudo-obstruction, treatment, Ogilvie syndrome, stent.

## INTRODUCTION

The Heald silastic anal stent (Figure 1) has numerous potential uses, amongst which are successful therapeutic decompression of the rectum for a leaking ileorectal anastomosis [1], decompression of a pre-sacral collection [2] and decompression of the rectum following trans-anal endoscopic microsurgery (TEMS) [3]. The first use of a Heald silastic anal stent in the successful decompression of pseudo obstruction is described here, negating the need for a laparotomy in a high-risk surgical patient.

## CASE REPORT

A 70 year male old presented with a non tender extremely distended, tense and tympanic abdomen (Figure 2). On digital rectal examination he had a gas filled rectum. An abdominal Computed Tomograph showed a tortuous and grossly dilated colon "pseudo-obstruction" and rectum. Flatus tube decompression after a phosphate enema was unsuccessful and the patient remained symptomatic. After consent, a Heald stent was inserted trans-anally on the ward after the administration of local anaesthetic jelly (Instillagel). Upon insertion, a large volume of free gas and stool was passed. The stent was well tolerated with only small amounts of post-procedural discomfort. After an instant reduction of 11cm abdominal girth (Figure 3), over the next four days a further progressive reduction in his abdominal distension was noted.

The stent was removed painlessly without the need for any anaesthesia or sedation on day four. A repeat abdominal radiograph showed much improved resolution of his dilated loops of large bowel. The pseudo obstruction did not reaccumulate during follow up of 12 months.



Figure 1: The hollow Heald anal stent.



Figure 2: Abdominal distension prior to stent insertion.

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**Figure 3:** Abdominal distension improved after Stent insertion with 11cm less abdominal girth. Reduced abdominal distension post stent insertion.

## DISCUSSION

We describe the first use of the Heald anal stent in the initial decompression and subsequent maintenance of decompression of the colon in a patient with pseudo-obstruction. Simultaneous correction of the underlying pre-disposing factors and initiation of promotility agents proceeded to allow a good recovery, which avoided surgery.

The device was invented and registered by Professor Bill Heald (Basingstoke), who generously gave our institution a supply of stents. Professor Heald originally intended the stent to act as an alternative to a loop ileostomy following low rectal surgery, however this has not become standard practice. The Heald stent acts to maintain a patent anus reducing the luminal pressure within the rectum to atmospheric pressure. The Heald stent is short, wide, pliable and self-anchoring in the anus. It can be inserted painlessly on the ward by medical staff, with only local anaesthetic jelly.

We have previously successfully used the device in a case of chronic pelvic sepsis for up to one year in a defunctioned rectum, where the rectum was draining the pelvic pus. There is only one standard size which is suitable for continuous use in most adults, if the patient finds the stent uncomfortable it may be easily be removed. We have had no cases of the stent becoming displaced inside the rectum, but the possibility does exist for this to occur.

The traditional treatments of rectal decompression in pseudo-obstruction include a Foley catheter or flatus tube but these are more prone to blocking or displacement as they are long tubes and not self-anchoring. We recommend this technique to gastroenterologist and surgeon alike as a safe, inexpensive, rapid and effective relief of pseudo-obstruction. Further study is needed to demonstrate after stent removal if pseudo-obstruction often reoccurs.

## CONCLUSION

A Heald anal stent has been used successfully to deflate the colon of a patient with pseudo-obstruction for the first time in this case. This technique appears safe and effective as a ward based therapy.

## RECOMMENDATION

Early use of the Heald stent may avoid the need for surgery in the management of pseudo-obstruction. A randomised trial may show benefits compared to traditional treatments.

## REFERENCES

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