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The Evaluation of the Benefit of a Nurse- Led One- Stop Rectal Bleeder Clinic

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Abstract:

Rectal bleeding is a common referral symptom to colorectal services. In a small percentage of people it can be a recognised symptom of bowel cancer warranting further investigation. With changes in government agendas and referral guidelines there is a vast increase in patients being referred on a fast-track cancer pathway. This paper will evaluate the evidence of the effectiveness of a straight to test, 'one- stop' rectal bleeding clinic in streamlining a service to meet these demands and diagnosing neoplasms of the left side of the bowel.

Key Words Key Words: Rectal Bleeding, Colorectal Cancer, Nurse Endoscopist, Early Detection, Streamlining Services

Context and Objectives

Rectal bleeding is the passing of blood from the back passage or anus and is a common presenting symptom to colorectal clinics. It is most commonly associated with benign conditions such as haemorrhoids, anal fissures or diverticular disease; however, it may also be a cause of colorectal cancer and polyps and therefore warrants further investigations (Allen et al 2004; Agaba et al, 2006; Hibberts, 2011; Royal College of Surgeons, 2013). In the UK there are over 4,000 new cases of bowel cancer each year and it is the second most common cause of cancer death. Early diagnosis of cancer is commonly easier to treat and shows better survival rates (Cancer Research, 2015; Public Health England, 2017). Patients normally attend the hospital for 3 appointments; consultation, procedure, either colonoscopy or flexible sigmoidoscopy, and follow- up clinic which can be a drain on hospital resources and patients' time (Toomey et al 1998; Allen et al 2004). Therefore, a one- stop rectal bleeding clinic can be a way to address the issue of number of visits to the hospital as well as speeding up the diagnosis of bowel cancers.

Why is a new care pathway for investigating rectal bleeding needed?

The number of cancer referrals to colorectal teams is vastly increasing. The Cancer Reform Strategy (Department of Health, 2007) sets out the pathway that patients suspected of cancer should be seen within 2 weeks of the GP referral and treated within 62 days of the GP referral. It was previously recommended that rectal bleeding with a change in bowel habit in a person aged over 60 should be referred on a fast-track pathway (Royal College of Surgeons, 2013). However, a change in NICE (2015) guidelines shows that patients having rectal bleeding at any age with or without associated symptoms can be referred on the cancer 2 week wait (2WW) pathway. As the previous NICE guidelines were aimed at those aged 60 and over, this extended criteria has put added pressure on hospitals to see an increased number of patients along this timed pathway. Compared to the rest of Europe, England falls below in cancer survivorship therefore, such government guidelines; like that set out by Public Health England (2016), emphasise the importance of early detection in bowel cancer to improve better outcomes (Sykes, 2017; Coleman et al 2011). A one stop rectal bleeding clinic can be used to address these government agendas to treat early and streamline a colorectal service to help cope with the added pressures of referrals for suspected cancer.

There are concerns that rapid access along the cancer pathway is unrealistic. The time frame in which patients are seen and then treated, with the added pressure of outpatient areas and surgery or oncology treatment, to be delivered does not reflect the current state of the NHS (Department of Health, 2007; Sykes, 2017). It is also reported that the rapid access process might be over or inconsistently used therefore patients with cancer are actually waiting longer due to the high number of referrals (Redaniel et al, 2015). Despite this, there are a high number of referrals it has also been reported that only around 2% of patients referred on a cancer pathway were found to have cancer (McCoubrey et al, 2012). However, Barrett et al (2006) found that 28% of cancers were found on the 2WW pathway. This may have been affected by the introduction of the NHS Bowel Cancer Screening Programme. Therefore, a one stop rectal bleeding clinic may reduce the pressures of the rapid referral system.

Straight- to -test is becoming recognised as important to improving the speed in which cancer is diagnosed. A ‘straight to test’ is a strategy in which patients under the 2WW rule undergo an investigation prior to outpatient assessment in order to streamline the

service and improve time to diagnosis (Banerjea, 2017). 2WW continues to diagnose the highest number of cancers compared to such things as the Bowel Cancer Screening Programme (NHS England, 2016). NHS England (2016) recognises straight –to- test can reduce wait times for first diagnostic test by between 7 and 14 days, by eliminating the outpatient appointment. It further reduces the need for outpatient space, nursing staff, medical staff and administration time. The one- stop rectal bleeding clinic would be classed as a straight- to test service as it misses the prior outpatient assessment. However, the diagnostic test must be performed within the 2WW period as this is classed as the patient being first seen therefore still putting stress in the time component on the first part of the pathway (NHS England, 2015).

Rectal bleeding is seen as a red flag for bowel cancer and therefore seen in the 2WW clinics. This is in line with NICE (2015) guidelines. It is important to establish whether the bleeding is altered or dark, as this can be associated with proximal bowel abnormalities or bright red blood, as this is associated with lower distal colon and rectal abnormalities (Hibberts, 2011). Both are seen in the referral guidelines as urgent and patients with these symptoms are generally referred on the 2WW referral pathway. Bright red blood is usually investigated via a flexible sigmoidoscopy for the fear of missing a left sided cancer (Mathew et al, 2004; Hibberts, 2011; NICE, 2015; Sykes, 2017). However, the yield of finding a left sided cancer has been reported as generally low (Astin et al, 2011; Bekkink et al, 2009; Toit et al, 2006). Surprisingly Barrett et al (2006) found that only 28% of colorectal cancers were found in 2WW clinics. Robertson et al (2006) attempted to predict colorectal cancer risk in patients with rectal bleeding and found that the most contributing factor was age group, rectal bleeding and change of bowel habit; the latter being found as the most associated bowel symptom to cancer. However, this study did not specifically look at rectal bleeding as an isolated symptom as suggested in its proposal and did not report the location of the bowel cancer.

What the Research Says

The ‘one- stop’ rectal bleeding clinic is a relatively new idea and published evidence of its effectiveness is limited. Although it is starting to be implemented across the UK, it has been discussed in the literature prior to changes in government agendas such as that by Toomey et al (1998). Although this study is over 20 years old, the authors

recognised the high number of referrals for rectal bleeding into the NHS. Their aim was to determine whether a flexible sigmoidoscopy was beneficial in a one stop rectal bleeding clinic. They reported that it is essential for all patients to have an investigation as 3 cancers out of the 344 investigated were missed in patients that were just treated as having haemorrhoids. One interesting finding was that the cancers were found in those over 50 which raises the point to whether a one - stop rectal bleeding clinic should just be a targeted service for over this age group.

A more recent study by Agaba (2006) reported their findings from a one-stop rectal bleeding clinic. They used this clinic to address and streamline the number of referrals regarding rectal bleeding. They outlined the importance of investigating rectal bleeding with an endoscope although they did not differentiate between the reasons of using flexible sigmoidoscopy for some patients and colonoscopy for others in their methods. Cancer was found in 4 patients (1.6%), polyps in 36 patients (14.4%) no incidences of abnormality was found in 98 patients (39%). The remaining patients had benign conditions including haemorrhoids and diverticula disease. One important finding was that the patients having rectal bleeding, nearly all the cancers found were left sided and within easy reach of a flexible sigmoidscope. Agaba (2006) study was limited in the number of people and duration, but it does support the effectiveness of a straight-to – test flexible sigmoidoscopy in finding early left sided bowel cancers. Their research supports earlier studies by Toomey et al (1998) and Mathew et al (2004) that cancer findings in those patients below the age of 45 was very low. A further study that supports a straight – to test rectal bleeding clinic is that by Chapius et al (1985). Again, this is an older study but shows that the predictive value for a left sided tumour with people with rectal bleeding was 34% compared to 0.9% in right sided tumours supporting the investigative test being a flexible sigmoidoscopy for rectal bleeding

There is further evidence to support a one- stop rectal bleeding clinic. Badger et al (2005) investigated flexible sigmoidoscopy as a preferred initial investigation through a one stop clinic. The most common finding was haemorrhoids and 1% of the patients were found to have a malignant neoplasm. However, their study only looked at patients below the age of 50 compared to Vellacott et al (1987) whose study looked at patients over 50 with rectal bleeding and had a higher finding of colorectal cancer at 4.1%. This could again outline that the straight- to – test clinic would be more effective in those aged over 50. Jones et al (2001) further examined a one- stop colorectal clinic. They

found that this process speeded up the diagnostic process however, the yield of bowel cancers diagnosed was low at 5 patients out of the 215 patients investigated. A later study by Toit et al (2006) supported investigations for rectal bleeding in their cohort study which found that one in 10 patients aged 45 or more had a colonic neoplasm, 5.7% of these were cancers. Interestingly, the Royal College of Surgeons (2013) further outlined in their commissioner guide that rectal bleeding can indicate colorectal cancer in 8% of patients over 50. These studies reflect the need for rectal bleeding to be investigated due to the incidence of left sided bowel cancers being found and it is evident to be more effective in those aged over 50.

Research into a one stop rectal bleeding clinic is low and slightly outdated. The main findings are that bowel cancers are commonly found in patients aged over 50 and with bright red rectal bleeding, these are found in the left side of the bowel. The studies included support that a one stop clinic speeds up the diagnostic process by saving men and women having to make three trips to a hospital. It further supports the government agendas of diagnosing cancer early and improving patient outcomes. However, more research is needed over longer time periods to truly assess its effectiveness in the diagnostic uptake and reducing mortality from colorectal cancer.

Methods

It has been previously discussed that the increase in colorectal referrals and government push to diagnose cancers early means that changes in current practice are needed. It has been recognised that nurses with expert, specialist knowledge can be used in the assessment of patients and the role of the nurse is changing to meet the needs of services (West, 2006; Hoffman et al, 2009). This is further supported by the Royal College of Nursing (RCN) (2012) who agree that nurses who have expert education to underpin their practice and the competencies to support, can make advanced clinical judgements and be effective Advanced Nurse Practitioners (ANP). Advanced nursing practice in colorectal speciality was previously seen in supporting patients following a cancer diagnosis or stoma as a specialist nurse but many are now being used to support colorectal consultants in clinics to assess patients in the 2WW clinics as ANP's (Barnwell, 2015). Nurses at this level need advanced assessment skills as set out by the RCN (2012). An ANP could run a one- stop rectal bleeding clinic if they have these outlined attributes and qualifications. They must also be trained in

performing flexible sigmoidoscopy. Nurse endoscopists already perform 20% of the workload in endoscopy which is estimated to increase to 40% in the next few years (Health Education England, 2017). They must be trained according to the Joint Advisory Group (JAG) prior to practicing independently and have been shown to be as safe and competent as that of medical endoscopists (Swarbrick et al,2005; JAG, 2012). Therefore, ANP's or Advanced Clinical Practitioners (ACP's) could be a safe and effective way of running these one- stop clinics

One possible variable for running a one- stop rectal bleeding clinic may be the endoscopy unit having the capacity to run this service. The demand for lower endoscopies has doubled between 2012- 2017 therefore putting added pressure on the endoscopy unit to cope with the increase in referrals (Brown, 2015). If units don't reach their quality standards, one of which is not meeting targets to scope patients in time, they put their Joint Advisory Group (JAG) accreditation at risk and may also be fined (JAG, 2013). There is also the issues of staff shortages and lack of physical space in which to perform the procedures, as well to administer the enema preparations (Brown, 2015; British National Formulary, 2017). Therefore, in order to set up the rectal bleeding clinic it must be taken in account the added work that the endoscopy units would have to absorb. There is limited research into how a rectal bleeder clinic will affect the endoscopy unit; more research is needed on the impact of the service on endoscopy units.

Careful attention must be made to the history of the patient attending a one- stop rectal bleeding clinic. Questionnaires as that stated by Agaba et al (2006) and Toomey (1998) will determine what symptoms the patient is experiencing and help to triage these patients to the correct service. A consultation model, such as the medical model, can direct the questions and ensure that information is not missed (Jarvis, 2016). It is important to establish whether the bleeding is bright red or dark red as dark red bleeding may warrant a colonoscopy to check for right sided pathology (Burling et al, 2007, Hibberts, 2011). Change in bowel habit or weight loss may need further investigation as it may indicate abnormalities in other areas (Badger et al, 2005; Royal College of Surgeons, 2013). There is also the legal aspect of gaining consent for the procedure and patients must be given all the information to make an informed decision to whether they want to go forward for a procedure (General Medical Council, 2008; DOH, 2009). They must include the risks of having a procedure which include

perforation, bleeding, abdominal discomfort and missed pathology (British Society of Gastroenterology, 2007). Healthcare professionals must follow the principle of non-maleficence when looking after these patients (Beauchamp & Childress, 1989; DOH, 2009). These raise the ethical implications around the rectal bleeder clinic as the majority of findings from flexible sigmoidoscopy are normal therefore is it more maleficence to do a procedure with risks for little gain to the patient.

It is part of the Nursing and Midwifery Code (NMC, 2015) that nurses preserve safety at all times. Therefore, guidelines and policies must be developed to underpin the nurse's practice when developing a rectal bleeding clinic. A good guide to follow is the quality assurance guidelines that were developed for the introduction of Bowel Scope by the BCSP that involves one of flexible sigmoidoscopy as a screening test for men and women aged 55 (NHS BCSP, 2015). This gives the ACP guidance in how to manage abnormalities found, for example, if a polyp is less than 1cm, this should be removed and sent for histology, if a polyp is greater than a 1cm, photos must be taken and the patient offered a colonoscopy (Public Health England, 2017). They further state that if no abnormalities are found the patients should be discharged. If a rectal bleeder clinic is to be there to assess both cancer pathway and benign pathway patients, the ACP must also be able assess haemorrhoids and treat if deemed necessary (Badger et al, 2005). It may therefore by feasible to follow the Royal College of Surgeons (2013) commissioner's guide that haemorrhoids should be banded, depending on the degree of prolapse and severity of symptoms. Guidelines and policies are needed to provide a safe pathway for patients undergoing a flexible sigmoidoscopy in a one stop rectal bleeding clinic.

In order to capture the effectiveness of the rectal bleeding clinic, audits must be conducted. A trial and clinical audit can be a way of showing that the service is being provided in line with current standards and highlight where improvements can be made (NHS England, 2017). This is supported by Sykes (2017) who states that a change in any working pattern should begin with a trial and the results fed back to the wider team, including management and stakeholders.

It is clear that there are increased numbers of referrals into the fast track cancer pathway, including patients with rectal bleeding. Change is needed to meet the demands of the service however research to support the effectiveness of a straight-

to – test rectal bleeding clinic is scarce. It is useful to look at the research that supports the BCSP 'bowel scope' service that offers a flexible sigmoidoscopy to men and women aged 55 (NHS BCSP, 2015). A large study by Atkin et al (2010) proved that a once-only flexible sigmoidoscopy between the ages of 55 and 64 can significantly reduce colorectal cancer incidence by a third by removing early adenomas. It highlighted that a flexible sigmoidoscopy is a safe and practical test and that two thirds of cancers found in this age bracket were located in the rectum and sigmoid (distal colon). However, this study only included men and women who would actively take part in a screening programme and may not be a true representation of the general public as uptake to the BCSP is generally low at around 50% (Cancer Research, 2017). A later study by Atkin et al (2017) highlighted that people having a one-off flexible sigmoidoscopy can reduce their risk of colorectal cancer by 35% and a 40% lower risk of dying from the disease. However, it again recognises that not everyone is taking part in this screening programme and further issues of people finding it difficult to take the time off work, it is resource intensive and there are limited trained endoscopists to perform this procedure (Atkin et al, 2017). Therefore, the BCSP provides evidence that if people above the age of 55 undergo a flexible sigmoidoscopy, this can drastically reduce their risk of developing and dying from colorectal cancer. If the number of people having this procedure increases this may prove in greater statistics in its effectiveness.

Another important aspect to look at is patients not attending their GP with their symptoms early. This is recognised by Donnelly et al (2017) who highlighted that patients delay attending their GPs for fear of embarrassment or wasting GP's time. They recommended that there should be an increase in early detection campaigns. A previous qualitative study by Hall et al (2010) is useful to understand people's views of not going to the GP. It showed that people often thought of their symptoms as normal and did not understand that their symptoms were red flags for colorectal cancer. Government agendas such as the Cancer Reform Strategy (DOH, 2007) highlight that more health promotion is needed to encourage people to go to their GP with these symptoms. If a one- stop rectal bleeding clinic were to begin it may therefore be useful to educate the public of its benefits and may encourage people to attend as it is more a streamlined service.

There is government support to streamline cancer services and a one- stop rectal bleeder clinic can be used to respond to high pressures of referrals. The introduction of bowel scope however, may see less patients being referred to a colorectal cancer clinic as there is evidence to suggest that the BCSP will remove adenomas and reduce cancer development. However, the uptake is still generally low at 50% and the 2ww pathway continues to diagnose more cancers than any other route (National Cancer Registration and Analysis Service, 2016). A more streamlined service means that cancers will be picked up early, which is shown to be fundamental to increased survivorship (DOH, 2007; Coleman et al 2011; Sykes, 2017). Although there are a few hospitals performing a one stop rectal bleeder clinic, its beneficial evidence is limited. Therefore, if a hospital is to implement a one stop clinic, audit and longer studies must be completed with greater numbers of people included in the studies. It would be useful to publish the evidence of the abnormalities it detected. Interestingly there was a general finding that neoplasms are diagnosed more commonly in patients over 50 (Toomey et al 1998; Mathew et al 2004; Agaba 2006). Outlining that one stop- rectal bleeder clinic would have paramount effectiveness in people of this age group

This paper has discussed the effectiveness of a one- stop rectal bleeding clinic. It has highlighted the UK government plans to streamline services to meet the demands of changes in cancer referral guidelines. This one stop clinic could be effective in meeting these demands and providing early diagnosis and better outcomes for patients being diagnosed with bowel cancer.

Conclusion

Flexible- sigmoidoscopy in 2WW diagnostic services and in the BCSP is proven to be a safe and effective procedure in diagnosing cancers early as well as preventing cancers developing in people aged over 50. It should only be used with bright red bleeding as other colorectal symptoms may mean cancers in the proximal colon and require different investigations. ACP's are an effective resource to run these clinics and that quality assurance guides as set out by JAG and the BCSP can guide their practice. Audits must be completed to evaluate effectiveness and demonstrate where improvements can be made. This paper further argues the case that more health promotion is needed to encourage people to attend their GP with red flag symptoms and provided with information of its benefits. The evidence supports the

implementation of a one stop rectal bleeding clinic for a more streamlined service and helping to detect left sided bowel cancers early.

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