

Research Article

Colonoscopy Comfort Scores Agreement between Endoscopy Nurses and the Endoscopists: Should the Patients Instead Award the Score?

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Abstract

Background: Abdominal pain during colonoscopy is measured using Gloucester score with 0 being no pain to 4 being severe enough pain to require procedure being abandoned. Ideally colonoscopy should be pain free. Endoscopy nurses record the pain score during the procedure separately from the endoscopist.

Aims and Objectives: This study evaluates the relationship between pain scores awarded by the nurses and the endoscopist.

Methods: All colonoscopy done in a district hospital over 7 days was studied. 59 cases were recruited.

Results: Almost one fifth of cases (18%) showed no agreement between the score awarded by the nurses and the endoscopists.

Discussion: Better understanding of pain score is required by both the nurses and the endoscopists. The question arises should the score actually be awarded by the patients themselves instead?

Background

Colonoscopy is widely used for diagnostic and therapeutic purposes. Colonoscopy should not be a painful procedure. Pain in Colonoscopy can be multifactorial including operator's technique, bowel preparation, usage of sedation and analgesia, and bowel visceral sensitivity. Lucio Trevasani particularly emphasised on emotional self of the patient so that fear, embarrassment and anxiety were recognised as major contributors to perception of pain by patients during colonoscopy [1]. As the operator gets more experienced in colonoscopy and the technique improves, the pain score in general is expected to improve as well. It is also well known that poor bowel prep can lead to not only inadequate mucosal visualization but also increase pain experienced during colonoscopy [2]. Patients may choose to have sedation, analgesia or both for colonoscopy and this can have an effect on the level of pain they might experience. Patients with irritable bowel syndrome may likewise feel more pain during endoscopy possibly from visceral hypersensitivity [3]. What factors determine the precise variability of the actual degree of pain or discomfort experienced during colonoscopy between patients is difficult to determine and can be subjective but factors listed above are known to aggravate pain during colonoscopy. Park, et al. further showed that female

gender, less age, symptomatic IBD, abdominal or pelvic surgery, lean body mass, longer time and difficult insertion all increased pain during colonoscopy [4]. Shah, et al. on the other hand consider sigmoid colon looping as the main factor for pain during colonoscopy especially in young females and suggest using image guide to reduce looping. They do not however show that using the image guide necessarily reduces pain even if looping is less [5].

Ensuring minimum pain during the procedure is a responsibility of the Endoscopists while monitoring of the pain is done by the endoscopy nurses. The normal format of colonoscopy requires one operator and at least two nurses to conduct the procedure. The Patient comfort score takes the form of the Gloucester score. Pain score 0 = no pain, 1 = minimal pain, 2 = moderate pain, 3 = severe pain, 4 = procedure abandoned.

Severity of pain experienced during colonoscopy is one of the measured parameters in the Joint Advisory Group (JAG) rolling audit of endoscopy unit performance in the United Kingdom. There should be no disparity between the pain score awarded by the nurses and that recorded or perceived by the endoscopists. Furthermore at least 90% of the patients should have a pain score of 0-1.

Aims and Objectives

The aim of the study was to assess the rate of agreement between endoscopy nurses who award the score and the endoscopists who actually perform the procedure, perceive and document the pain score in colonoscopy at a sample district general hospital in United Kingdom.

Methods

Data was collected prospectively over a period of one week. It included all the colonoscopies held at a sample district hospital in United Kingdom during this period. Flexible sigmoidoscopy and upper GI endoscopies were excluded. This is a prospective study analysing the hospital database and patients clinical notes as they were documented. The data was anonymized. Endoscopists perception of the pain score during colonoscopy was recorded from the report on the software called "Endosoft". The report on the Endosoft is generated in the endoscopy report personally by the operator. It thus reflects the personal perception of the colonoscopist regarding the level of pain experienced by the patient during the procedure. It was compared with the pain score awarded by the nurses as documented in the nursing admission and care pathway notes. The record in the nursing notes is the personal perception of the endoscopy nurse regarding severity of pain experienced by the patient during the procedure. Both the operator and the endoscopy nurse use the same measurement scale to record pain. This is called the Gloucester score and is a validated method of measurement of pain [6]. The study included colonoscopist from all grades: Consultants, Nurse Endoscopists and Registrars. The study included both; medical gastroenterologists and Colorectal Surgeons with their respectively associated endoscopy practitioners. Nurses awarding the score were either registered Staff Nurses or Endoscopy trained Health Care Workers.

Results

Total of 59 colonoscopy procedures were performed over 1 week. In 43 (72%) cases, there was a complete matching of pain score awarded by the nurse and the operator. So there was an agreement in almost three quarter of the cases. 6 (10%) sets of notes were unavailable for one reason or the other so had to be excluded from the study. However, 11 (18%) sets of notes showed no cohesion between the two scores. Thus in almost one fifth of cases there is still a disparity between the Nurses who have awarded the score and the endoscopists who have done the procedure, perceived and documented the severity of pain experienced by the patient.

Discussion

More communication is warranted between the nurses and the endoscopists to come to agreement on pain score. This is necessary as pain is classed as a measure of quality in colonoscopy. Any disparity between perceptions of the endoscopists and the monitoring nurses will lead to a drop in validity of pain as a genuine measurable parameter of endoscopic skills. Disparity

in perception of pain score between the operator and the nurses can lead to incorrect documentation on "endosoft" reports which can lead to inaccurate impression about the patient's tolerance of the procedure. This can be important in future, should the patient require further colonoscopy later on. It may also mislead on how easy or difficult the procedure actually was.

Methods to improve upon severity of pain experienced by the patient during colonoscopy have been described extensively. It is expected that more experienced operators would, in general, get less looping of the scope and hence patient should experience less pain. Good bowel preparation improves the visualisation and reduces severity of pain experienced by the patient. If sedation has been given with or without analgesia, patient's perception of pain may be different from when procedure is done without these. Similarly, Buscopan reduces spasm of the colon and can affect the severity of pain if used during colonoscopy. Buscopan is said to improve quality of colonoscopy but is not without its risks especially in patients with cardiac problems and advancing age. Correct choice of patients for colonoscopy is also very important. Thus patients with irritable bowel syndrome or previous pelvic surgery may experience more severe pain during colonoscopy. Personal sensitivities and level of anxiety all contribute to an increased severity of pain during colonoscopy and can be addressed with better communication with the patient prior to the procedure, as well as during the procedure.

Could utilizing real-time Magnetic Endoscope Imaging (MEI) be associated with the determination of pain scores by the endoscopy nurses? Image guide can indicate presence or absence of scope looping and data has already shown that looping causes pain. However, many patients do not complain of pain despite excessive looping while others have lot of pain despite an absolutely straight scope. Hence Image guides may enable to understand the one possible reason for experiencing pain during colonoscopy but will remain rather non-specific and not a very sensitive aid. This study covers a short interval of one week and offers no comparison with other hospitals in the country. We did not analyse reasons for any high pain scores or mismatch of scores between the operator and the monitoring person. We did not also focus on colonoscopy completion rates. Despite these limitations, what clearly emerges from this study is that if pain score is to be taken as a valid parameter of quality in colonoscopy, then how and by whom it is recorded should be taken as equally important.

The study did not take into account sedation, use of pain killers during or before procedure and underlying diagnosis. These patients could have been considered as separate groups for comparison. Will patient centered care lead us to let the patient award the score instead of the doctors and the nurses? After the entire patient is the best person to describe severity of pain suffered by him or her and is the main stake holder in the process. Only the wearer knows where the shoe pinches.

This very important question that is being asked in our study, whether the patient should be the one determining the pain level, can easily be answered in subsequent studies. It can be done by

giving the patients (at least those without sedation) a questionnaire to answer and comparing that with the medical personnel views.

References

1. Trevisani L, Zelante A, Sartori S (2014) Colonoscopy, pain and fears: Is it an indissoluble trinomial?. *World J Gastrointest Endosc* 6: 227-233.
2. ASGE Standards of Practice Committee, Saltzman JR, Cash BD, Pasha SF, Early DS, et al. (2015) Bowel preparation before colonoscopy. *Gastrointestinal endoscopy* 81: 781-794.
3. Imai A, Kato M, Ono S, Shimizu Y, Takeda H, et al. (2012) Efficacy of carbon dioxide-insufflating colonoscopy in patients with irritable bowel syndrome: a randomized double-blind study. *J Gastroenterol Hepatol* 27: 1623-1628.
4. Park DI, Kim HJ, Park JH, Cho YK, Sohn CI, et al. (2007) Factors affecting abdominal pain during colonoscopy. *Eur J Gastroenterol Hepatol* 19: 695-699.
5. Shah SG, Brooker JC, Thapar C, Williams CB, Saunders BP (2002) Patient pain during colonoscopy: an analysis using real-time magnetic endoscope imaging. *Endoscopy* 34: 435-440.
6. Ekkelenkamp VE, Shaw I, Valori R, Dunckley P (2011) Comfort scores in colonoscopy performance. *Gut* 60: A44-A45.