# Tattooing will benefit patients with colorectal cancer

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#### Introduction

'Tattooing of all lesions ≥20 mm and/or suspicious of cancer outside of the rectum and caecum should take place in 100% of cases following local trust guidance'.¹ Therefore, an audit was performed with the main goal being to determine if a tattoo was completed in accordance with the national guidelines, where the tattoo was made and if the result of the biopsy was a cancer diagnosis. The expected result of the audit is to show the importance of tattooing in all the suspected cancer polyps. This would support the implementation of best practice in the surgery department by all the doctors and surgeons carrying out future procedures.

# Materials and methods

A cohort of procedures was chosen comprising all the patients that had had a colonoscopy between 1 October 2017 and 31 October 2018 (1 year and 1 month). An excel sheet was built based in the hospital data program 'Endobase', with the following information: patient NHS number; the date of the procedure; if cancer was diagnosed; if a photo was taken; if the polyp was tattooed; if it was placed correctly; who did the procedure and other observations. Following these, in each procedure, the information was registered in the 'Endobase' and the histological patient report was crossed, to verify if the final diagnosis of the colonoscopy biopsy was cancer or not.

## Results and discussion

From the 401 sets of patient data reviewed, 194 patients had complete data with colonoscopy results. Overall, 131 patients (68%) were diagnosed with cancer and 63 patients (32%) did not have cancer. When we started analysing the endoscopies that were diagnosed with cancer, we concluded that 86 procedures (66%) were not tattooed. 16 (12%) were tattooed incorrectly and only 29 (22%) were tattooed correctly according to the guidelines. When reviewing the procedures that did not lead to a cancer diagnosis, 57 (90%) were not tattooed, one (2%) was not tattooed correctly and 5 (8%) were tattooed correctly. The majority of the endoscopies were not tattooed or the procedure was not done correctly.

The cost of having to repeat procedures because the polyp was not tattooed and the patient needs to be submitted to surgery is too high.<sup>2</sup> Both cancer and non-cancer lesions that need to be surgically removed (that are not in an area that can be easily identified like the rectum) need to be tattooed in the submucosa with an injection of black carbon ink in 3 or 4 quadrants around the lesion.<sup>3</sup> Colorectal cancer is still one of the largest causes of death in the United Kingdom and the adoption of best practice not only benefits patients but also contributes to the saving of NHS money.<sup>4</sup>

## **Conclusion**

Raising awareness of the importance of tattooing during colonoscopies has the potential to improve patient outcomes and reduce costs to the NHS. ■

# **Conflicts of interest**

None declared.

#### References

- 1 NHS. Quality Assurance guidelines for colonoscopy. NHS; 2011.
- 2 Rees CJ, Thomas Gibson S, Rutter MD et al UK key performance indicators and quality assurance standards for colonoscopy. Gut 2016;65:1923–9.
- 3 Zerey M, Hawver LM, Awad Z et al SAGES evidence-based guidelines for the laparoscopic resection of curable colon and rectal cancer. Surg Endosc 2013;27:1–10.
- 4 Rex DK, Schoenfeld PS, Cohen J et al Quality indicators for colonoscopy. Gastro Endosc 2015;81:31–53.

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