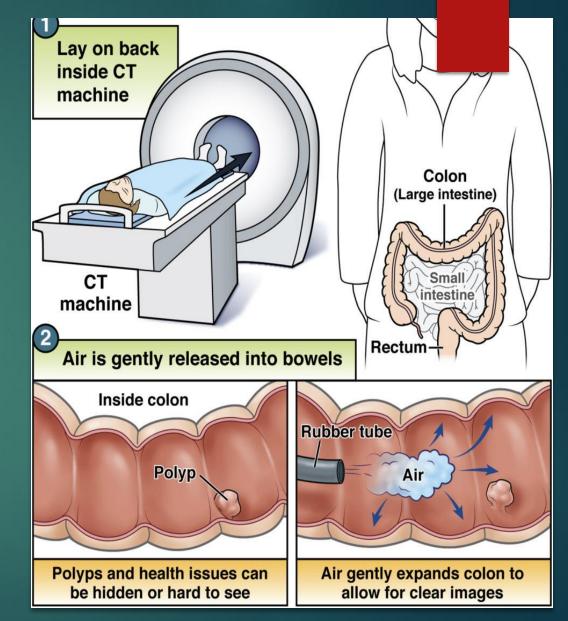


Assessing Local Practice Regarding Requesting of CT Colonography Within a Short Time Frame of a Recent CT Abdomen/Pelvis

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What is CT Colonography?

- CT colonography (CTC) is a low risk computed tomography (CT) examination to look at the colon. It is a method of diagnosing bowel cancer when it is still at an early stage.
- A thin flexible tube is inserted into the anus, and carbon dioxide gas is administered to insufflate the colon to allow for good evaluation.
- Two differently positioned scans are obtained with IV contrast:
 - A supine scan
 - A prone scan (if unable, a right decubitus positioning can be used)



Positives and Negatives of CTC

POSITIVES	NEGATIVES
Better tolerated than traditional optical colonoscopy with lower risk	Radiation exposure
Less examination time	Discomfort relating to insufflation
No requirement for sedation/anaesthesia	Risks associated with contrast administration
Good sensitivity for colorectal cancer detection	Limited visualisation of flat/minimally elevated lesions
Allows assessment of any extra-colonic disease	Exclusively a diagnostic test

Why do we do CTC?

Failed colonoscopy

Colonoscopy is deemed not suitable for the patient

Patient choice

Objectives

- To review locally whether CT Colonography is routinely requested within a short time frame (4 months) of a CT Abdomen and Pelvis.
- To review the benefit CT Colonography adds in these cases.

Methods

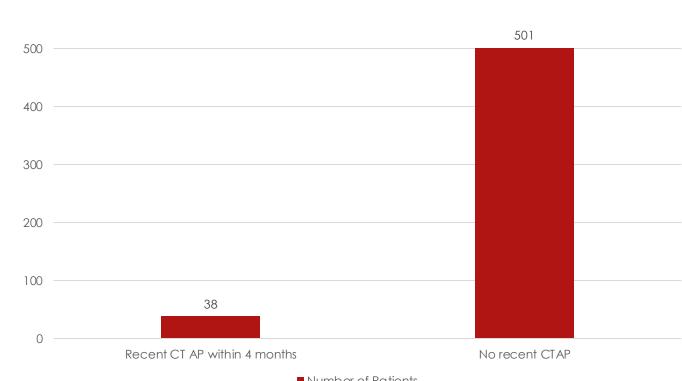
- Retrospective data from all patients who had undergone CTC over the last 12 months were collected.
- Those patients who had had a contrast enhanced CT Abdomen and Pelvis in the 4 months prior were then extracted (n=38).
- These cases were then examined in more detail to determine whether the CTC revealed any previously unknown pathology.
- If this was the case, detailed review of the initial CTAP was performed to see if this could be seen in retrospect.

Data and Results

 539 patients who had undergone CT Colonography from 02/08/22 to 27/07/23 were reviewed. 600

 Of this 38 (7%) had undergone a CTAP with contrast within 4 months of the CTC.

Number of Patients who had undergone CTAP within 4 months of CT Colonography



Number of Patients

Data and Results

- Of those 38 patients, 2 (~5%) had unexpected findings including:
 - T1 well-differentiated transverse colon adenocarcinoma
 - Low grade dysplasia sigmoid polyp
- These were not well visualised on the preceding CT Abdomen/Pelvis.

Number of Patients with Unexpected Findings on CTC after recent CTAP

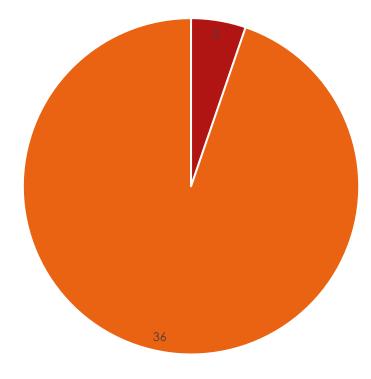
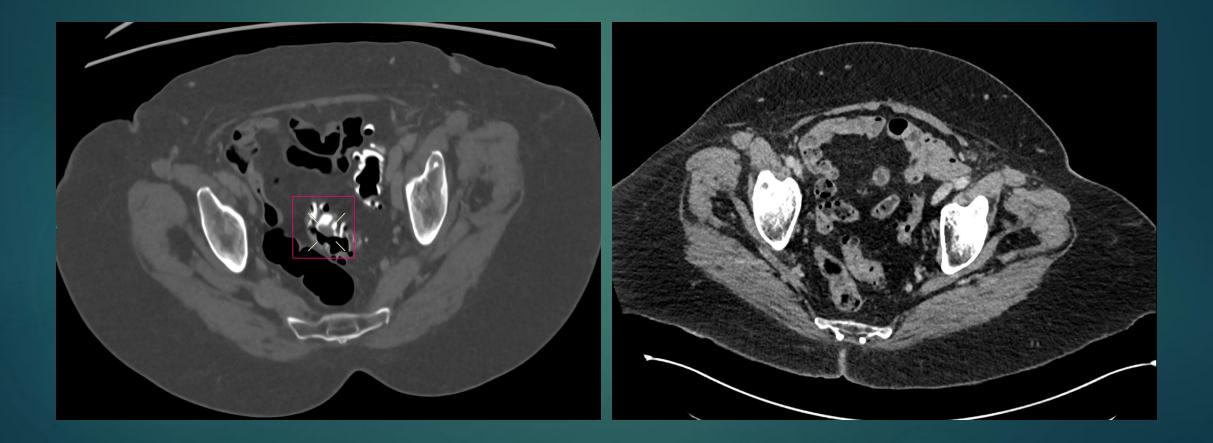


Image showing CT Colonography (left) and previous CTAP (right) which shows the benefit of CTC in identifying a small T1 adenocarcinoma of the transverse colon





CTC (Left) with CTAP (Right) again demonstrating the benefit of CTC in identifying this polyp with low grade dysplasia in the sigmoid colon



Discussion

- The project demonstrates that locally CTC is not routinely performed within close-proximity of a CTAP.
- The results are reassuring in that clinically significant colonic polyps/cancer are unlikely to have been missed on a recent CTAP.
- It also reinforces the benefits of CT Colonography, in that subtle/early lesions are much better identified.
- As a result, we have advised those involved with CTC protocolling to review any recent prior imaging closely as we have seen that bulky tumours are likely to be visible and therefore this may negate the need for CTC for the patient thereby helping a busy service.