

Hello partners in the return to colorectal cancer screening. The American College of Radiology (ACR) colon cancer committee was asked to respond to questions raised during the recent virtual 2020 NCCRT annual meeting.

**Q: “Can CT colonography (CTC) be useful in returning to screening during the COVID-19 pandemic?”**

**A:** Absolutely yes. A number of locations can be found using the My CT Colonography locator tool<sup>1</sup>(this tool is not comprehensive, therefore your local institution should be contacted) Several institutions have in fact turned to more CT colonography during the pandemic for several reasons listed in the table below.

**Table:** Usefulness of CT Colonography (CTC) during the COVID-19 Pandemic<sup>2</sup>

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1. Similar to optical colonoscopy, CTC is a structural preventative exam and can see the entire colon
  2. CTC has a lower risk of colon complications such as perforations as compared to optical colonoscopy<sup>3</sup> with the lower likelihood of requiring an inpatient bed during the pandemic
  3. CTC is performed without sedation so there is no need for another person to accompany or drive the patient to the imaging center thus promoting social distancing
  4. No risk of Adverse reaction to anesthetic with resultant need for hospitalization during the pandemic and sedative medications are preserved for other patients
  5. CTC is easily scheduled as an early morning appointment for vulnerable patients
  6. Curbside check in is available to decrease time in a waiting room at some imaging centers
  7. Shorter procedural time (15-20min), with no need to pre-procedure IV placement or post-procedure monitoring reduces time in a healthcare facility
  8. Less direct contact with fewer health care workers (e.g., one CT technologist and/or one radiologist is intermittently in the CT suite during the exam)
  9. Decreased need for personal protective equipment (PPE) compared to optical colonoscopy as more healthcare workers are required for optical colonoscopy (e.g. endoscopist, anesthesiologist or nurse anesthetist, nurse(s) for IV placement and procedural and post-procedural monitoring.)
  10. CTC can triage patients for polypectomy or surveillance depending on lesions found as compared to stool-based tests and can better detect precancerous lesions as compared to stool-based tests
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**Q: “Is there a limitation for detecting flat lesions with CTC?”**

**A:** The detection of flat lesions also known as sessile serrated adenomatous polyps (SSPs) can be challenging equally for traditional optical colonoscopy as well as CTC. Performing CTC using a standard bowel preparation of catharsis and stool tagging however was reported by Kim et al in 2016 with good evidence to result in a prevalence of **1.4%** in detecting non-diminutive, flat/sessile serrated polyps ( $\geq 6$  mm)<sup>4</sup>. This was similar to the **1.7%** incidence of SSPs large pathologic study by Lash et al<sup>5</sup>. Longitudinal long term follow up confirms that significant numbers of interval cancers between screenings do not occur and that any initially missed flat lesions can be subsequently detected and removed<sup>6</sup>. Most CTC exams in the United States are commonly performed utilizing a cathartic prep with the stool-tagging protocol. Flat lesions are also dominantly located in the right colon. CTC is commonly used in follow-up when optical colonoscopy is unable to reach the right side.

**References:**

1. <https://www.acr.org/Clinical-Resources/Colon-Cancer-Screening-Resources/My-CT> Colonography (Accessed April 25, 2020)
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3. Bellini D, Rengo M, De Cecco CN, Iafrate F, Hassan C, Laghi A. Perforation rate in CT colonography: a systematic review of the literature and meta-analysis. *Eur Radiol* 2014;24:1487-1496.
4. Kim DH, Matkowskyj KA, Lubner MG, et al. Serrated polyps at CT colonography: prevalence and characteristics of the serrated polyp spectrum. *Radiology* 2016;280(2):455–463.
5. Lash RH, Genta RM, Schuler CM. Sessile serrated adenomas: prevalence of dysplasia and carcinoma in 2139 patients. *J Clin Pathol* 2010;63: 681-686
6. Pickhardt PJ, Pooler BD, Mbah I et al. Colorectal Findings at Repeat CT Colonography Screening after Initial CT Colonography Screening Negative for Polyps Larger than 5 mm. *Radiology* 2017;282(1):139-148.