

Policy for Same Day Completion Barium Enema Examination and CT Colonography After Incomplete Colonoscopy

This policy is based on a review of the literature and our previously existing policy for performance of double-contrast barium enema examinations post endoscopic biopsy or polypectomy. In the past, we typically did not perform enema examinations for 72 hours in patients after “deep biopsy” or polypectomy. On December 12, 2007 at a GI section meeting, based on the literature review, it was decided to extend this to seven days, reflecting what has been reported in animal and human studies concerning time to re-epithelialization after biopsy involving the muscularis propria (“deep biopsy”).

A review of the literature (see references below) reveals the following: Contrast enema examination after biopsy of colon cancer is safe. Polypectomy particularly using hot biopsy forceps, can extend to the level of the muscularis propria and therefore, there should be a delay before performing a barium enema or CT colonography examination. There is ambiguity regarding superficial/mucosal biopsies. Most studies agree that it is safe to perform an enema on the same day in these patients. However, it is difficult for the endoscopist to accurately determine the depth of penetration during biopsy. In general, biopsies performed via colonoscope should be superficial, while those performed through rigid proctoscopes have a tendency to be more deep, although this cannot be confirmed in any particular case from this information alone.

Drs. Wilcox (Chief of Gastroenterology) and Canon (Chief of GI Radiology) agree to the following policy:

- All patients having endoscopic biopsies (other than a colon cancer) or polypectomy should delay one week before undergoing a barium enema examination or CT colonography examination.
- The Failed Colonoscopy worksheet that is completed by the gastroenterologist specifically includes questions about performance of biopsy and this should be completed. However, before a same day barium enema or CT colonography examination, the technologist must confirm with the GI lab nurse that biopsy or polypectomy has not been performed. The radiologist should attempt to reconfirm with the patient before beginning the examination.
- Because the literature suggests that same day double-contrast BE is safe for superficial biopsies, these examinations can be performed in individual cases at the radiologist’s discretion. Because it is difficult to be certain if a biopsy is confined to the mucosa and submucosa, such examinations should be unusual.

References:

1. Maglinte DDT, Strong RC, Strate RW. Barium enema after colorectal biopsies: Experimental data. *AJR* 139:693-697, 1982
2. Harned RK, Consigny PM, Cooper NB, Williams SM, Woltjen AJ. Barium enema examination following biopsy of the rectum or colon. *Radiology* 145:11-16, 1982
3. Harned RK, Williams SM, Maglinte DDT, Hayes JM, Paustian FF, Consigny PM. Clinical application of in vitro studies for barium-enema examination following colorectal biopsy. *Radiology* 154:319-321, 1985

4. Low VHS. Questions and Answers. AJR 170:1104-1105, 199

Policy approved by:

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Date

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