

# CT Colonography Colonic Mucosal Flat Lesions

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# CT Colonography

## Colonic Mucosal Flat Lesions

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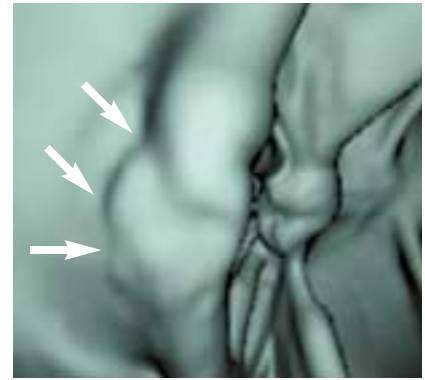
### Case Study #1

#### Patient History

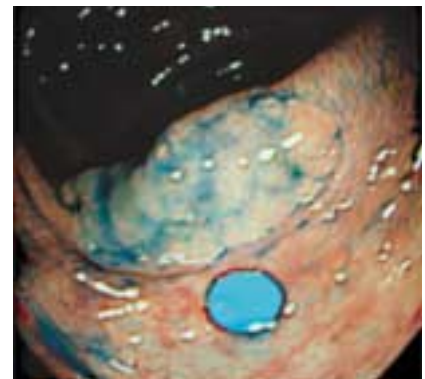
The patient is a 72-year-old male with a history of colonic superficial lesion pointed out in the transverse colon with barium enema. Before colonic endoscopy, A CT Colonography (CTC) with IV contrast was performed using a GE LightSpeed™ 16-channel multidetector CT. Using the AdvantageCTC™ software, no appreciable lesion was noted in the transverse colon as indicated by the Barium Enema exam. The analysis software did, however, detect a flat adenoma in the ascending colon, suggested by its three-dimensional elevated appearance without wall deformity. IV-contrast enhancement was appreciated to help diagnose a flat adenoma.

#### Results

Conventional endoscopy confirmed no abnormality in the transverse colon and verified the flat elevated lesion in the ascending colon. No other findings were noted. Pathologic study of a biopsied specimen revealed the lesion was tubular adenoma with moderate dysplasia.



**Figure 1**  
CT Colonography from distal side



**Figure 2**  
Conventional colonoscopy



**Figure 3**  
Multiplanar reformatted image

## Case Study #2

### Patient History

The patient is a 66-year-old male scheduled to undergo conventional colonoscopy with an indication of positive fecal occult blood. Before colonoscopy, CT Colonography was performed using IV contrast. AdvantageCTC software demonstrated a flat elevated lesion with slight wall deformity located in the rectum. The lesion was visually well enhanced in the arterial dominant phase. Neither distant metastases nor lymphadenopathy were noted two-dimensionally. With these findings, tubular adenocarcinoma of early stage was suggested.

### Results

A flat elevation with irregular surface was detected in the rectum with conventional colonoscopy, as with CTC. No wall deformity was noted endoscopically. Pathologic study of a surgically removed specimen revealed that the lesion is well-differentiated tubular adenocarcinoma and the tumor had invaded to the submucosal layer.

### Protocol

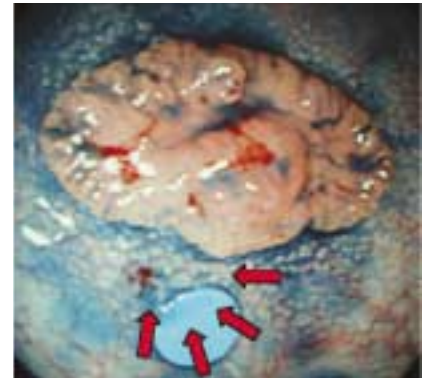
Scan type	Helical
Rotation time	0.6 sec
Slice Thickness	0.625mm
Pitch	1.375
FOV	30cm
kVp	120
mA	Auto mA
Prescan delay	25sec
Recon type	standard
Total scan time	18sec

### Contrast parameters

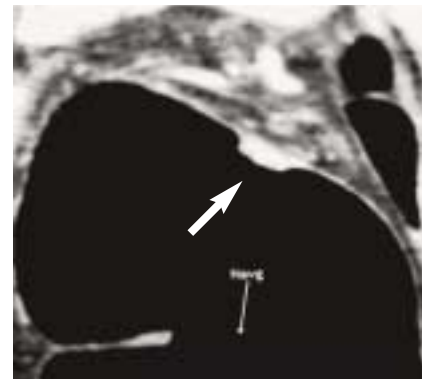
Rate	4.0cc/sec
Total contrast amount	100 cc
Type of contrast medium	Iopamiron 370



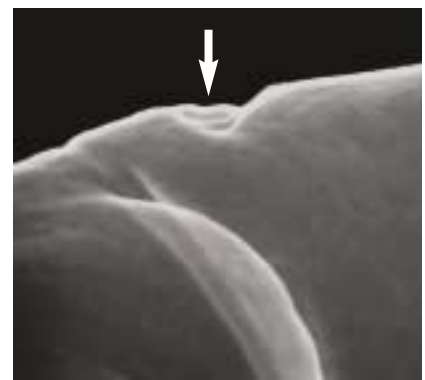
**Figure 1**  
CT Colonography from distal side



**Figure 2**  
Conventional colonography



**Figure 3**  
Multiplanar reformatted image  
(coronal view)



**Figure 4**  
Air enema image (volume)

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