

: (computed tomogra-  
 phy, CT) (remnant stomach)  
 CT  
 : CT  
 (1 cm ) 25 CT  
 11 , 가 14  
 ,  
 , 가 (perigastric strands)  
 15 mm  
 : 18.4 mm , 12.6 mm  
 15 mm 11 10 , 14 3 ( $p$   
 $< 0.05$ ). 가 3 , 가 8 ,  
 가 13 , 가 1 ( $p < 0.05$ ).  
 / (8 ), / (1 ), / (2 ) , / (7  
 ), / (4 ), / (1 ), / (2 ) . 가 11 9  
 , ( $p < 0.05$ ). 7 ,  
 ( $p < 0.05$ ).  
 : CT  
 , , , 가 , .

CT 가 가 (4, 5).  
 (1). CT 가  
 3 - 5 mm , 1 cm (2). 가  
 CT 2 - 3  
 가 (6),  
 (3). 가  
 (gastric stump) (anastomosis)  
 (celiac axis) (hepatic pedicle) CT CT

CT

CT 1 cm 25

CT 13:12 30 71 52.8

3-53 ( 18.5 )

CT 가 20

가 5 CT 11 , 14

qui - square

8 , p 0.05

2 , 가 4

CT Somatom Plus 40

1 300 ml

200 - 300 ml 500 - 600 ml

18G

Omnipaque (Iohexol, Nycomed, Oslo, Norway)

3.0 ml 120 ml

30 60

7 mm 7 mm

(hepatic dome)

18.4 mm , 16 - 21 mm

10 - 25 mm 12.6

가 11 10 , 1 15 mm

15 mm 가 14

3 , 11 15 mm

( $p < 0.05$ ).

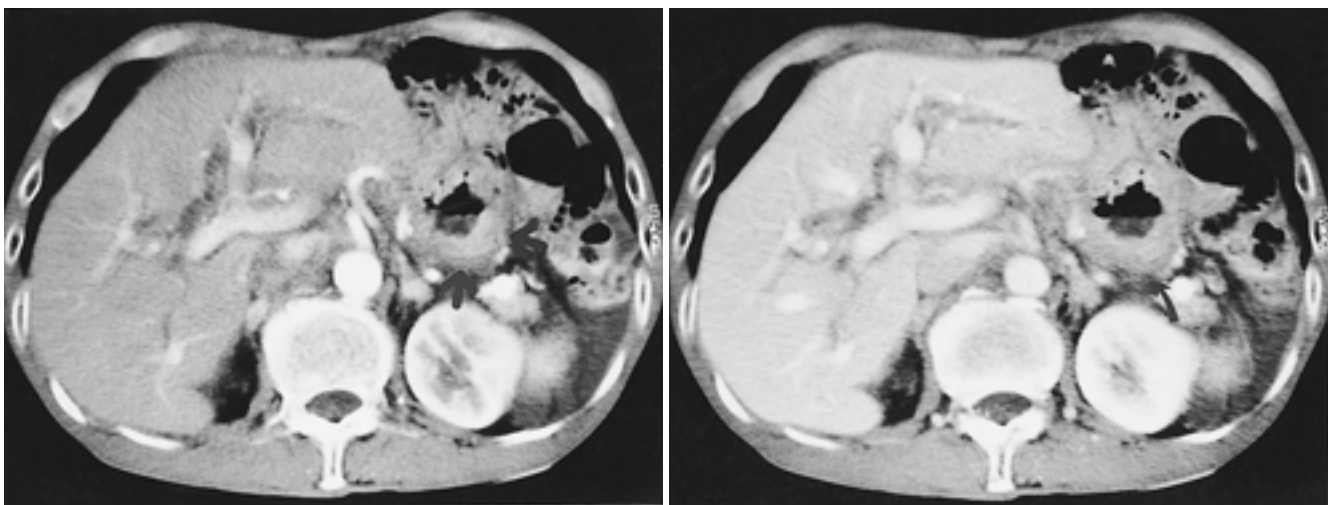
11 8 (72.7%)

, 3 (27.3%)

가

(nodularity)

가



**A** **B**

**Fig. 1.** A 64-year-old man with recurrent cancer confirmed by endoscopic biopsy at anastomosis site

**A.** Arterial phase CT scan shows well enhancing diffuse wall thickening, maximal 16mm thickness at anastomotic site (arrows).

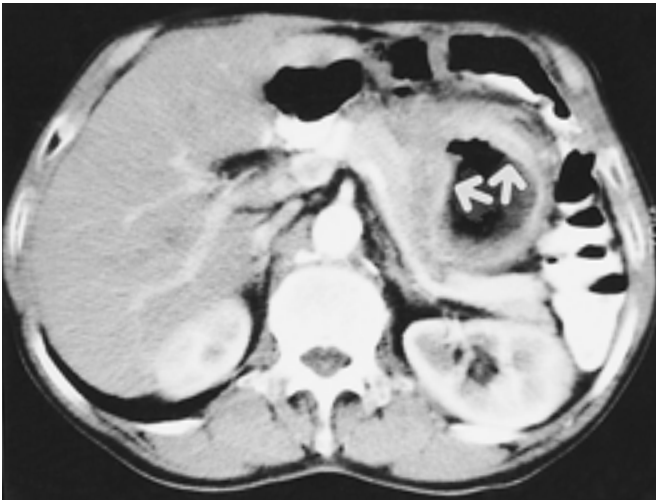
**B.** Portal phase CT scan also shows well enhancement and indistinct outer margin (curved arrow).

13 (92.9%) , 1 (7.1%)  
( $p < 0.05$ ).  
1

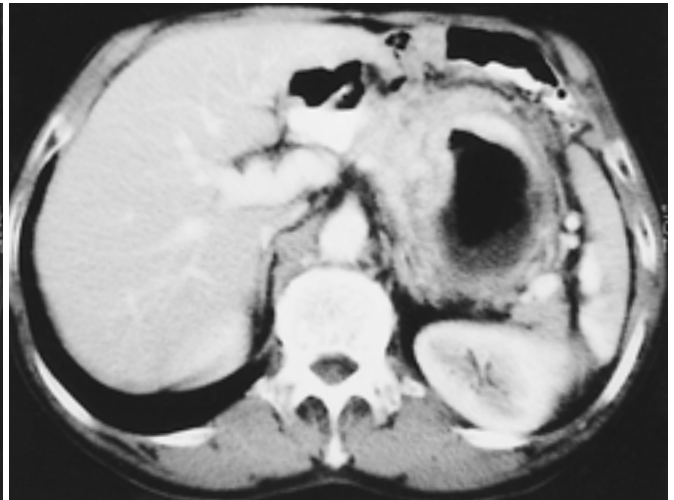
14 7 (50%) ,  
4 (28.6%) ,  
2 (14.3%)  
1 (7.2%) ,

가 1  
가 11 8 (72.7%)  
(18.2%) , 1 (9.1%) , 2

(81.8%) , 가 11 8  
14  
( $p < 0.05$ ).  
7  
1 (9.1%) (18.2%)  
( $p < 0.05$ ).



A



B

**Fig. 2.** A 67-year-old man with recurred cancer at gastric stump.

**A.** Arterial phase spiral CT scan shows mild enhancement at gastric side of anastomosis (arrows).

**B.** Portal phase CT scan shows more homogeneous enhancement than arterial phase, maximal 15mm thickness and perigastric strands.



A

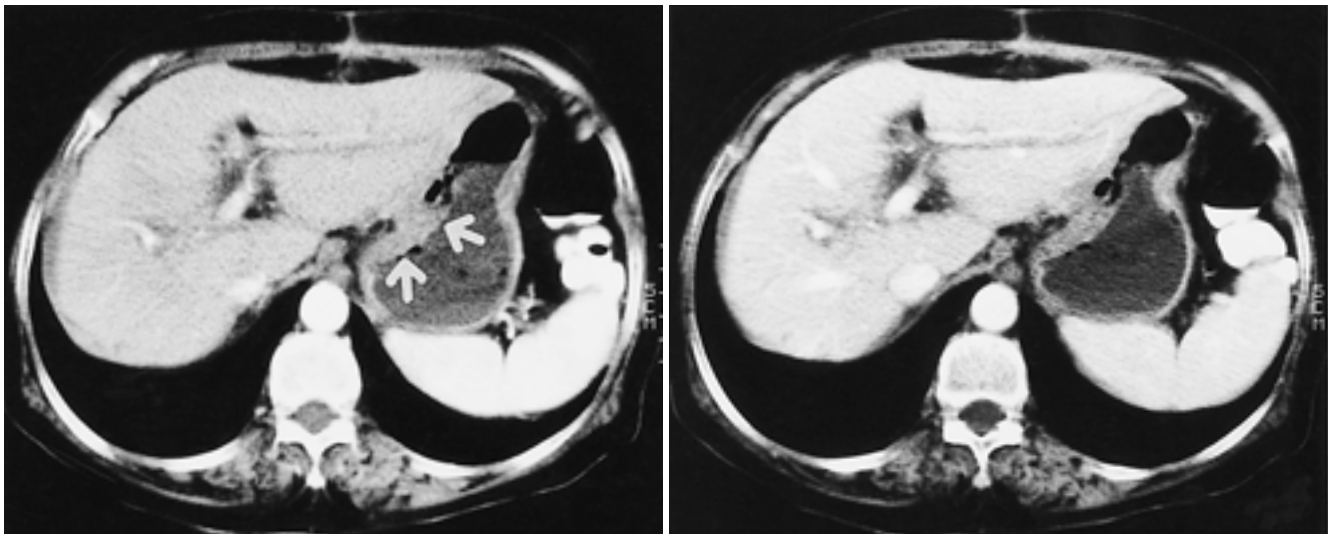


B

**Fig. 3.** A 54-year-old woman with gastritis.

**A.** Arterial phase CT scan shows focal low attenuated wall thickening with mild linear mucosal enhancement (arrow).

**B.** Portal phase CT scan shows linear mucosal enhancement, too.



**A**  
**Fig. 4.** A 66-year-old woman with gastritis.  
**A.** Arterial phase CT scan shows poorly enhancing low attenuated focal wall thickening, and maximal 10mm thickness (arrows).  
**B.** Portal phase CT scan also shows poor enhancement without perigastric strands and combined lymphadenopathy.

CT (9),  
 1 mm 2 cm (10).  
 가 , CT,  
 MRI (emptying study) .  
 가 900 ml  
 가  
 (11),  
 (12). glucagon (1 mg) (2).  
 가  
 가 (13).  
 CT (7).  
 CT (11).  
 (8). (4)  
 (69%), (28%), (22%),  
 (11%)  
 CT  
 (90%) (10%)  
 2 cm ( 1.7 cm)  
 (5)  
 가  
 가  
 가  
 가  
 (2, 10), (4)

가

92.9%

72.8%

가

, 1

가

CT

, 가

(1, 3, 17)

72.7%

, 50%

4 (28.6%)

2

가

(1).

81.8%

가

가

6 (55.6%)

1 (7.1%)

가

가

CT

가

가

CT

900 ml

CT

가

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J Korean Radiol Soc 2000;43:735 - 740

## Gastric Wall Thickening on Spiral CT after Subtotal Gastrectomy for Gastric Cancer: Comparison between Recurrent Cancer and Benign Thickening<sup>1</sup>

Chang-Sook Park, M.D., Jong-Cheol Choi, M.D., Sung-Kuk Yoon, M.D., Jae-Ik Kim, M.D., Jong-Young Oh, M.D., Myung Jin Kang, M.D., Ki-Nam Lee, M.D., Kyung-Jin Nam, M.D.

<sup>1</sup>Department of Diagnostic Radiology, College of Medicine, Dong-A University

**Purpose:** To determine the features revealed by two-phase spiral CT scanning useful for differential diagnosis between recurrent cancer and benign wall thickening in patients who have undergone subtotal gastrectomy for stomach cancer.

**Materials and Methods:** We retrospectively reviewed 25 cases in which wall thickening of more than 1 cm in the remnant stomach after subtotal gastrectomy was revealed by two-phase spiral CT scanning. All cases were confirmed: 11 were recurrent cancer, and in 14, benign wall thickening was demonstrated. We analyzed the CT findings including maximal thickness of the gastric wall, patterns of wall thickening, degree of contrast enhancement seen during the arterial and portal phases, and the presence of perigastric strands. Maximal wall thickness was classified as either more or less than 15 mm, and as either focal or diffuse. We also determined whether lymphadenopathy was present.

**Results:** Mean maximal gastric wall thickness was 18.4 mm in the recurrent cancer group ("group A") and 12.6 mm in the benign group ("group B"). The gastric wall was thicker than 15 mm in 10 of 11 group A cases and in 3 of 14 in group B; wall thickening was focal (n=3) or diffuse (n=8) in group A, and focal (n=13) or diffuse (n=1) in group B, while the enhancement patterns seen during the arterial and portal phase, respectively, were high/high (n=8), low/high (n=1) and low/low (n=2) in group A, and low/low (n=7), low/high (n=4), high/low (n=1) and high/high (n=2) in group B. Perigastric strands were observed in nine cases in group A, but in none in group B, while lymphadenopathy was combined with wall thickening in seven group A cases but in none of those in group B.

**Conclusion:** In patients who have undergone subtotal gastrectomy for gastric cancer, two-phase spiral CT findings including maximal thickness of the gastric wall, patterns of wall thickening, degree of contrast enhancement seen during the arterial and portal phase, the presence of perigastric strands, and lymphadenopathy are useful for differential diagnosis between recurrent cancer and benign wall thickening.

**Index words :** Stomach, CT  
Stomach, neoplasms  
Stomach, surgery

Address reprint requests to : Chang-Sook Park, M.D, Department of Diagnostic Radiology, Dong-A University College of Medicine, 1, 3-Ga, Dongdaesin-dong, Seo-gu, Pusan 602-715, Korea.  
Tel. 82-51-240-5368 Fax. 82-51-253-4931