



Clinical application and evaluation of CT in the diagnosis of esophagus and gastrointestinal tract diseases

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Abstract

AIM: To detect the examined methods of esophagus and gastrointestinal tract with CT scan and evaluate its clinical application.

METHODS: 83 cases esophagus and gastrointestinal tract patients were examined with CT scan. All were confirmed by surgical and pathological findings. They included 28 cases in the esophagus, 32 cases in the stomach, 1 cases in the small intestine, 22 cases in the large intestine. Preparation before examination esophagus patients had 10-20 mL of the oral administration of 5% urografin 5-10 min after 3 g of the oral administration of puvis efferve scientiae compositae. Stomach patients had 350-500 mL of the oral administration of mineral water and turned round the body in examined-bed 2-3 times. Intestine patients had 350-500 mL of 5% urografin in 24 or 12 h before scanning, when necessary, visualization of large intestine is achieved by introduced 600-900 mL of air through a Folly tube scanning methods: simple scan, object scan, enhanced scan.

RESULTS: 83 cases included 80 with cancer or tumor, 1 with hiatal hernia, 1 with small intestinal crohn's disease, 1 with pyloric obstruction. In the newer-lesions group, there were 20 cases, diagnostic accuracy was 90%, 2 cases were false diagnosed. In the post-operation reexamination group, there were 33 cases, 15 cases had been found recurrence and/or metastasis, including 6 cases distant organ metastases. Recurrence rate is 45.5%. In the definite diagnosis group, there were 30 cases 100% lesions could be displayed by CT, there were 10 cases carcinoma infiltrated into adjacent tissue and 2 cases carcinoma metastasized to distant organ. In the 80 cases, metastasis rate is 25%.

CONCLUSION: With well prepared examination, CT of esophagus and gastrointestinal tract can well display the lesions of tumor. It is also valuable to study other diseases of esophagus and gastrointestinal tract, *e.g.* crohn's disease, hiatal hernia. Re-examination patients with CT scan can be observed the change of disease and found early recurrence and/or metastasis. The plan of treatment thus can be corrected. Definite diagnosis patients with CT scan. It can be found whether lesion infiltrate into adjacent tissue or metastasize to distant organ, so the plan of treatment can be ascertained.

Key words: Gastrointestinal diseases/radiography; Esophageal diseases/radiography; X-ray computed tomography

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