

Meeting abstract

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## The role of CT in acute mesenteric ischemia

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### Background

Acute mesenteric ischemia is not a frequent abdominal emergency. The 90% mortality of this affection is related to a delayed diagnosis. Superior mesenteric artery embolism is the most frequent cause of mesenteric ischemia. In this study we analyzed the diagnostic role of CT in this disease.

### Materials and methods

From 1998 until 2007 32 patients (18 women, 14 men) with a mean age of 62 years underwent operation for primary intestinal ischemia at our institution. The medical and surgical records and imaging studies were reviewed retrospectively.

### Results

Only 12 patients (37.5%) performed a preoperative diagnostic CT study, whereas in 20 cases (62.5%) the intestinal ischemia was diagnosed during surgical exploration. The acute mesenteric ischemia caused primarily by occlusive superior mesenteric artery in 26 cases (81.2%) and by venous thrombosis in 6 cases (18.7%). Most of the embolus are located approximately 3–10 cm from superior mesenteric artery emergence. An arterial embolus can be detected like filling defect or like an abrupt interruption of vascular enhancement. Frequently a secondary venous thrombosis follows the arterial occlusion. CT shows a moderate intestinal wall thickening and inclusions in air signs of intestinal gangrene. Only 19 (59.3%) of 32 patients survived the acute intestinal ischemia (in hospital

mortality was 40.6%), delayed diagnostic and operation caused higher mortality. In 12 cases a preoperative diagnostic CT was performed the mortality was 32.5%.

### Conclusion

According a difficult clinical diagnosis of acute mesenteric ischemia and the necessity of an early diagnosis we suggest to perform a CT at all patients with risk factors and acute abdominal pain for whom we have a clinical suspicious.