

Risk Factors Of Malignant Mucinous Cystic Neoplasm Of Pancreas And Its Prognosis

Ji Won YOO¹, So Jeong YOON¹, Ok Joo LEE¹, Ji Hye JUNG¹, Sang Hyun SHIN¹, Jin Seok HEO¹, In Woong HAN*¹

¹Department Of Surgery, Samsung Medical Center, REPUBLIC OF KOREA

Background : Mucinous cystic neoplasm (MCN) of pancreas is a rare pancreatic disease which has potential to become malignant. While early surgical resection of MCN is a mainstay of treatment, radical pancreatic surgery involves high morbidity. The aim of this study was to investigate risk factors of invasive MCN with its prognosis and to establish an appropriate treatment modality for MCN.

Methods : From January 2004 to December 2018, a total of 129 patients underwent surgical resection for MCN in Samsung Medical Center, and their clinicopathological data were retrospectively reviewed. Risk factor analyses for recurrence and survival were performed.

Results : There were 108 patients in non-invasive group and 21 patients in invasive group. There were more patients with preoperative elevated CA19-9 and mural nodules on preoperative images in invasive group than in non-invasive group ($p=0.003$ and $p=0.003$, respectively). In comparison of surgical outcomes, patients who underwent laparoscopic surgery had fewer major complications than those with open surgery ($p=0.022$). Elevated CA19-9 and mural nodules were independent risk factors for invasive MCNs ($p=0.016$ and $p=0.011$, respectively). Patients with invasive MCN showed poorer recurrence-free survival comparing to those with non-invasive MCN ($p<0.001$), and elevated CA19-9 was an associated factor ($p=0.007$). Invasive group had worse overall survival ($p<0.001$), and American Society of Anesthesiologists score and elevated CA19-9 were associated factors ($p=0.005$ and $p=0.005$, respectively).

Conclusions : Preoperative elevated CA19-9 and mural nodules on image were associated with invasive MCN, which showed poor recurrence-free and overall survival. Surgery should actively be considered in patients with these features.

Corresponding Author : In Woong HAN (cardioman76)