Follow-up Strategy for IPMN

Giovanni Taffurelli¹, Marielda D’Ambra¹, Carlo Alberto Pacilio¹, Salvatore Buscemi¹, Eugenia Peri¹, Francesco Monari¹, Claudio Ricci¹, Raffaele Pezzilli², Lucia Calculli³, Donatella Santini⁴, Riccardo Casadei¹, Francesco Minni¹

Departments of ¹Surgery, ²Internal Medicine and Gastroenterology, ³Radiology, and ⁴Pathology, “S.Orsola-Malpighi” Hospital. Bologna, Italy

Context IPMNs can be surgically treated or managed conservatively. Objectives To evaluate the effectiveness of the follow-up strategy for IPMN. Methods From January 2003 to June 2012, data regarding 184 patients with IPMNs, as well as type of management (surgery or follow-up), were recorded in a prospective database. Indication to surgery was established according to international consensus guidelines. The patients were divided in three groups: group A (G1), patients with criteria for surgery selected for surgical treatment; group B (G2) patients without criteria for surgery selected for radiological follow-up; group C (G3) patients with criteria for surgery but with high surgical risk selected for radiological follow-up. Failures of our strategy was a pathological diagnosis of benign IPMN in G1 or deaths for malignant IPMN in G2 and in G3. The intention to treat analysis was carried out. Finally we evaluated overall survival (OS) and disease-specific survival (DSS) among the three groups. Results Sex, age and presence of co-morbidities were similar among the three groups. Surgical treatment was proposed in 42 (22.8%) patients (group A). Radiological follow-up was suggested in 142 (77.2 %) patients. Of these, 119 (83.8%) did not present criteria for surgery (group B), while only 23 (16.2%) had one or more criteria (group C). Overall mean follow-up was 30.5±22.4 months. Rate of success was lower in group A than in groups B and C (45.2%, 100%, and 95.7% respectively; P<0.001). Moreover, no patient developed criteria for surgery after a mean follow-up of 28.1±20.0 months in group B. Mean OS was similar among the three groups (36.1±26.3, 28.1±20, 32.8±25.7 months in group A, B and C, respectively) while DSS was lower in group A than in group B and C. Particularly, six patients died for malignant IPMN in group A, none in group B and only one patient in group C (14.2%, 0%, and 4.3%, respectively; P=0.007). Conclusion For patients without criteria of malignancy a follow-up strategy seems effective. Patients with criteria for surgery, without high surgical risk, have to be surgically treated.