Introduction: Endoscopic therapy has become an accepted treatment option for T1a esophageal carcinoma (adenocarcinoma or squamous carcinoma) while for T1b cancers, surgery is still considered as a treatment of choice. Endoscopic resection (or dissection) allows precise histopathologic staging which is used to guide therapeutic decisions (surgery or continuation with endoscopic treatment).

Methods: The aim of this prospective, single center study was to assess the long-term efficacy of endoscopic treatment for early esophageal carcinoma. The main outcome measurement was complete remission defined as an absence of neoplasia (CR-neoplasia).

Results: The study involved 40 consecutive patients (mean age 66, range 35-85; 35 males and 5 females) undergoing endoscopic treatment (37x endoscopic resection; 3x endoscopic submucosal dissection) for esophageal carcinoma. Thirty-three patients (82.5%) were diagnosed with early adenocarcinoma (EAC) within Barrett’s esophagus, the remaining 7 patients (17.5%) had early squamous neoplasia (ESC). In 20 patients (50%), ER/ESD was combined with radiofrequency ablation (RFA). The total number (median) of treatment sessions per patient (ER + RFA) was 2 (1-5). The median follow-up was 20 months (range 3-66). A total of 36 patients (90%) achieved complete local remission of neoplasia after endoscopic treatment. Twenty-six patients (65%) were diagnosed as T1a cancers with mucosal invasion. Among them, four patients were referred for surgery (three patients with multifocal cancer not allowing complete local remission, one patient in which RFA of remaining dysplastic mucosa was not technically feasible). In the remaining 22 patients the endoscopic treatment was considered as curative. Fourteen patients (35%) were diagnosed as T1b cancers with submucosal invasion (11 patients with sm1 and three patients with sm2). Among them, 4 patients were referred for surgery (3 of them achieved a complete local remission after endotherapy). The remaining 10 patients did not undergo surgical treatment (comorbidity, patient’s preference, age etc.) and endoscopic treatment was regarded as a definitive treatment. In all 32 patients who underwent only endotherapy, a 100% local remission rate of neoplasia was achieved and no patients presented with lymph node metastases during follow up. No lymph node metastases were detected during the subsequent histopathological analysis in any patient undergoing esophagectomy. Histologically, no carcinoma was found in the esophagus among the five patients which were referred for surgery despite the complete local remission of neoplasia.

Conclusion: Endoscopic therapy is effective in the treatment of T1a early esophageal cancer. It appears to be a good alternative to esophagectomy in patients with T1b carcinomas. The risk of lymph node metastases after endoscopic treatment for T1b tumors seems lower than the risk of surgery.