Introduction: The optimal approach for radical surgery in patients with Siewert’s type II esophagogastric junction (EGJ) cancer remains uncertain. Some authors consider esophagogastrectomy by thoracoabdominal approach or esophagectomy with hemigastrectomy for Siewert’s type II EGJ cancer to be standard in terms of more radicalism, while the others prefer extended total gastrectomy by abdominal approach and accept it being more adequate for avoiding higher complication and death rate. The aim of this trial is to study the local recurrence rate at region of esophagojejunal anastomosis in order to clarify the adequacy of extended total gastrectomy by transabdominal approach for Siewert’s type II EGJ cancer.

Methods: This is a retrospective single-institution study of 83 consecutive patients (m – 61, f – 22) with Siewert’s type II EGJ cancer at IB-IIIC studies undergone extended total gastrectomy by transabdominal approach between July 2007 and December 2013 at the Department of Oncology, Azerbaijan Medical University. During this period of time 171 patients underwent radical surgery for EGJ cancer. According to Siewert’s classification on EGJ cancer 26 cases (15.2%) were diagnosed as type I, 88 (51.5%) – type II, and 57 (33.3%) – type III cancer. 3 patients with Siewert’s type II EGJ cancer underwent extended proximal gastrectomy by thoracoabdominal approach, 2 – extended proximal gastrectomy by abdominal approach. The mean age of the remained 83 patients undergone extended total gastrectomy by transabdominal approach was 57.4 (32-80) years. Pathohistological examination confirmed adenocarcinoma in all cases. The T stages according to 7th Edition of AJCC/UICC guidelines of tumors were as following: T2 – 3 (3.6%); T3 – 28 (33.7%), T4a – 40 (48.2%) and T4b – 12 (14.5%). In all patients the hiatus was enlarged by cutting the diaphragm and esophagus was cut as higher as possible technically. The proximal resection margin was 3.0 (2.6-4.4) cm. In all cases D2 lymphadenectomy plus paracardial and lower posterior mediastinal lymph node dissection was done. No patient received neoadjuvant chemotherapy. In the follow-up period esophagoscopy was carried out only in patients with dysphagia. Thoracoabdominal CT was done on indication.

Results: Histological examination revealed cancer cells on the esophageal cut surface in 2 (2.4%) cases (R1 resection). Histopathological analyses of dissected lower posterior lymph nodes found metastasis in 2 (2.4%) patients. No patient developed anastomotic leakage (0%). No postoperative death occurred (0%). During the 22.4 (2-76) months of follow-up period only one patient (1.2%) developed local recurrence at the site of anastomosis. No patient developed mediastinal lymph node enlargement during the follow-up period.

Conclusion: According to our results we believingly report that extended total gastrectomy by abdominal approach is an adequate choice of surgery for Siewert’s type II EGJ cancer with acceptable recurrence and death rate. Surgery plus adjuvant chemotherapy can be more effective than surgery alone in terms of local recurrence at the site of anastomosis. A special study is needed to clarify this question.