Introduction: Total resection of the bursa omentalis has developed as an essential part of extended surgery for gastric cancer. Aim of this study was to evaluate the safety and therapeutic effects of bursectomy for gastric cancer (GC).

Methods: Patients with histologically proven, potential resectable GC (T1-4N0-2M0), were eligible. In standard group (SG) gastrectomy was performed with D2 lymphatic dissection. In bursectomy group (BG) enbloc bursectomy was additionally performed. One hundred forty eight patients were enrolled between December 2008 and December 2013. Both groups were statistically comparable (BG - 278 patients; SG = 276 patients).

Results: The mean of operation time was non-significantly longer in BG (182 ± 23 min vs 155 ± 27 min, p = 0.12). Intraoperative blood lost was without difference in both groups (118 ± 34 ml vs 116 ± 26 ml, p = 0.6). It was not registered surgical mortality at all. Morbidity rate was 18.4% and 13.4% in BG and SG respectively (p = 0.82). The most common postoperative morbidity type was acute pancreatitis and pancreatic fistula. Bursectomy was not associated with higher in-hospital stay (the mean duration of hospital stay was 8.7 and 8.9 days in BG and SG respectively). Overall 5-year survival showed true difference and was better in BG group (52.2% vs 38.7% P < 0.05).

Conclusion: Gastrectomy with D2 lymphatic dissection and bursectomy can be safely performed with similar morbidity to standard D2 gastrectomy in patients with resectable GC. Bursectomy with D2 lymphatic dissection was associated with 5-year overall survival benefit.