I. Fleischmann, R. Warschkow, U. Beutner, L. Marti, B. Schmied, T. Steffen

Department of general, visceral, endocrine and transplantation surgery
Kantonsspital St. Gallen, CH

Improved survival after retrieval of 12 or more regional lymph nodes in appendiceal cancer

Introduction

- Cancers of the appendix are scarce
- No study is assessing the optimal number of removed regional lymph nodes (RLN) for a better oncological outcome
- In colon cancers the removal of at least 12 lymph nodes is recommended for colon cancers
- How much RLN have to be resected in appendiceal cancers?

Methods

- Population-based analysis
- Trend analysis, joinpoint regression, Cox regression and propensity score methods
- Between 2004 and 2012, 1046 patients with primary stage I-III carcinoma of the appendix were identified in the Surveillance, Epidemiology and End Results database

Results

- Node positivity increased with the number of retrieved RLN (10.5% in patients with 1 RLN removed → 30.6% in patients with 10 RLN)
- This leveling off was confirmed by joinpoint regression analysis (P=0.023)
- For the survival analysis the somewhat higher cutoff of 12 RLN was applied, since this cutoff is recommended by the guidelines for colorectal cancer

Conclusion

- A better oncological outcome can be expected by removal of 12 or more RLN in patients with appendiceal cancer. This finding is comparable to recent guidelines for RLN removal in colorectal cancer.

References: