

Trends in Partial Nephrectomy Use in Italy: Data from the Piedmont Region in the Last Decade

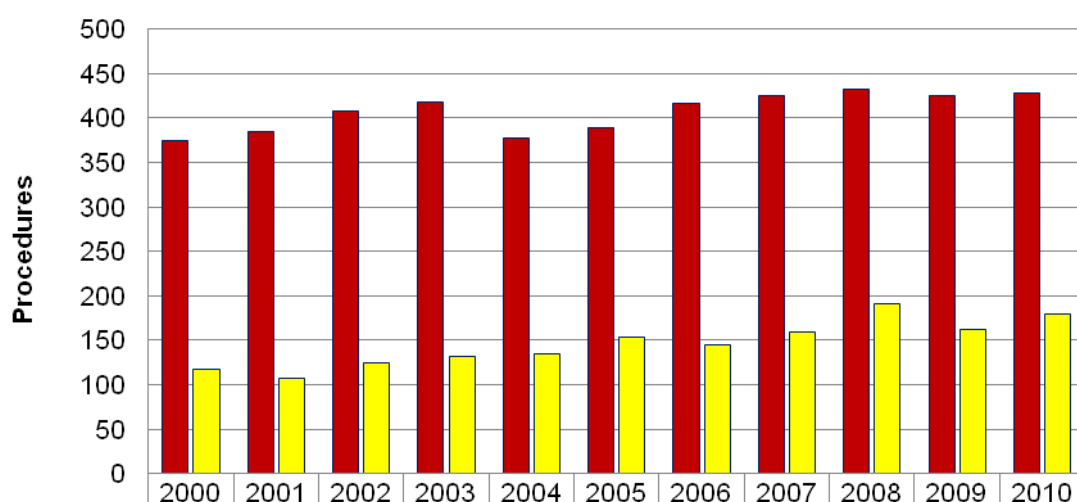
Introduction and Objective: Recent studies have shown that partial nephrectomy (PN) has equivalent oncologic outcomes of radical nephrectomy (RN) for localized renal tumors. The most recent international guidelines for renal cell carcinoma (RCC) recommend the use of nephron sparing surgery (NSS) for renal lesions up to 7 cm in size whenever technically feasible. Despite this PN remains underused in North America. The aim of this study was to evaluate trends in PN use during the last decade in a north-western Italian region.

Materials and Methods: The regional archives of hospital discharge records in Piedmont region from January 2000 to December 2010 were retrospectively analyzed. All procedures recorded with the ICD-9 codes 55.3, 55.4 (PN) and 55.5 (RN) performed for a primary diagnosis of renal tumor (189.0) were included in the analysis (n=6180). The surgeries were performed in 43 different urological institutions, that were stratified according to academic status and hospital nephrectomy volume (high >300, intermediate 100-300, low <100 nephrectomies in the study period). Trends in the use of PN were assessed overall and according to institution type.

Results: The overall number of surgical procedures for renal tumors performed in Piedmont region increased significantly from 2000 to 2010 (+27%). RN is the preferred surgical treatment, but an increasing use of PN was observed over the study period. (Figure) This trend is more significant in centres with high renal surgical volume (+ 19.9%) and in non academic centres (+13.7%).

Conclusion: PN is increasingly performed in the last decade in Piedmont region. The most significant increase in the indications to NSS was observed in institutions with high renal surgical volume. However, PN remains relatively underused and strategies to enhance conservative treatments of renal tumors should be implemented.

Trend in PN and RN, Piedmont 2000-2010



■ Radical Nephrectomy	375	385	408	418	378	389	417	425	433	425	428
■ Partial Nephrectomy	118	107	124	132	135	153	145	160	191	162	180