

**[560] PERIOPERATIVE COMPLICATIONS OF PELVIC LYMPHADENECTOMY IN 1380 PATIENTS UNDERGOING RADICAL RETROPUBIC PROSTATECTOMY BETWEEN 1993 AND 2006**

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Introduction and Objective: The study objective was to evaluate perioperative complications associated with pelvic lymphadenectomy [PLA] in patients undergoing radical retropubic prostatectomy [RRP]. In particular, the influence of the extent of PLA and of other possible risk factors on the complication rate was examined. Methods: All intraoperative and early postoperative complications occurring in 1380 consecutive patients who underwent RRP were documented. Those complications related to PLA were described and evaluated via univariate analysis to explore the role of possible risk factors. Results: A limited PLA was performed in 867 patients and an extended procedure in 434 patients. In an additional 60 cases data was missing and in 19 patients PLA was omitted. The intraoperative complications associated with PLA consisted of two obturator nerve injuries and six ureteral lesions. Statistical analysis revealed no significant correlation between the incidence of these complications and any of the variables examined. Early postoperative complications included one relevant hemorrhage of the obturator artery and symptomatic lymphocele formation in 72 patients. In the last mentioned group of patients, six subsequently exhibited deep vein thrombosis and two additionally pulmonary embolism. An additional two patients developed an infection of the lymphocele. In contrast, of the 1308 patients without lymphocele, only 13 experienced deep vein thrombosis and only six pulmonary embolism. A similar distribution was seen in the group of patients who underwent reoperations, 44 of which were performed in patients with lymphocele and 43 in patients without lymphocele. Both thromboembolic events [ $p=0.001$ ] and reoperations [ $p<0.0001$ ] were significantly more frequent in patients displaying lymphocele formation. We observed lymphoceles in 29 of 867 patients following limited PLA and in 41 of 434 patients after extended PLA [ $p<0.0001$ ]. This correlates to the higher number of lymph nodes removed in patients with lymphocele [ $p=0.0038$ ]. Conclusions: PLA is the cause of a relevant number of complications in patients undergoing RRP. Lymphocele formation and the associated reoperations and thromboembolic sequelae account for by far the highest percentage of these complications. Extended PLA was identified as a risk factor for lymphocele formation. The exploratory nature of these findings notwithstanding, the decision of when to perform PLA and to what extent should not be made thoughtlessly.