Abstract

Purpose: To report on the series of patients taken to laparoscopic pelvic lymphadenectomy for prostate cancer in the Hospital Central de la Policia from January 2004 to May 2009. Materials and methods: We reviewed the clinical history of patients taken to classificatory or complementary laparoscopic pelvic lymphadenectomy during radical prostatectomy for prostate cancer. The biopsy Gleason score, PSA level, TNM, number of lymph nodes obtained, number of positive lymph nodes and the percentage of cases in with and without biochemical relapse were reviewed. Results: A total of 24 laparoscopic pelvic lymphadenectomies were included. Four of them were extended. The average age was 65 years and preoperative PSA was 21mg/mL (3.6 - 71 ng/mL). Ten patients were classified as having T1C tumors (41.6%), five T2A (21%), five T2B (21%), 3 T2C (12.5%) and one T3A (2%). Gleason score was 3 + 3 (41.6%) in ten patients, 3 + 4 in five, 4 + 3 (21%) in five and 4 + 4 (16.6%) in four. The average number of nodes obtained was 7 (4 - 13 nodes) and only two patients had positive nodes (8.3%). Of the 24 cases, 16 patients (67%) have an undetectable PSA, and 6 of them have a biochemical relapse (25%); five of them are under surveillance, 3 received salvage radiotherapy, 1 received androgen deprivation therapy, and only 2 (8.3%) developed metastases with an average time to biochemical relapse of 18 months. Of the cases with metastases, 1 is in androgen deprivation therapy after salvage radiotherapy and 1 case is hormone refractory and is receiving chemotherapy with docetaxel. None of the patients included have had a cancer specific death with an average follow up of 29 months. We had only two complications. Two lymphoceles (8.3%) were seen, both handled with antibiotic therapy and percutaneous drainage. Conclusions: In our institution, we practice laparoscopic pelvic lymphadenectomy to patients with intermediate and high risk prostate cancer. Extended pelvic lymphadenectomy (only 4 cases) is not frequently done. The number of patients with positive nodes is low. This fact may suggest that extended lymphadenectomies should be performed. Laparoscopic lymphadenectomy is a safe procedure. No major complications were seen. In most cases, cancer was organ confined. All of the patients are alive. 67% are disease free and 25% presented with a biochemical relapse without metastases, with average follow up of 29 months. Longer follow up is required.

Keywords
Prostate cancer, pelvic lymphadenectomy, radical prostatectomy, laparoscopic radical prostatectomy, positive lymph nodes.