European study shows radical prostatectomy may benefit patients with extended disease

The role of surgery in node positive (pN+) and metastatic prostate cancer will be explored this morning during the European Association of Urology (EAU) Lecture.

Christian G. Stief, M.D., professor and Chairman of the Department of Urology at the Ludwig Maximilians-Universität Münchon in Munich, Germany, will provide data supporting radical prostatectomy (RP) for pN+ and some metastatic prostate cases based on information collected from the Munich Cancer Registry. The EAU Lecture, The Role of Surgery in N+ M+ Prostate Cancer, will be presented during today’s Plenary I session in Hall B1 of the Georgia World Congress Center.

Every pathohistological cancer diagnosis in the greater Munich area must be recorded in the Munich Cancer Registry. According to Dr. Stief, 35,629 cases of prostate cancer were identified between 1988 and 2007. Of those cases, 1,413 had positive lymph nodes when lymphadenectomy was performed before radical prostatectomy.

Of those patients 957 underwent radical prostatectomy despite having positive lymph nodes and planned prostatectomy was abandoned in 456.

Overall patient survival was 84 percent at 5 years and 64 percent at 10 years for those who underwent radical prostatectomy. For those who abandoned the prostatectomy, the 5-year and 10-year survival rates were 60 percent and 28 percent, respectively.

The relative survival for patients treated with radical prostatectomy at five and 10 years was 95 percent and 86 percent, respectively. Patients who abandoned surgery had relative survival rates of 70 percent and 40 percent.

Median follow-up for patients was 5.6 years, and Dr. Stief said these results have been supported by other retrospective studies.

"Thus we conclude that lymph node positive patients with RP had improved survival compared to patients with abandoned RP," he said. "These results suggest that RP may have a survival benefit and the abandonment of RP in lymph node positive cases may not be justified."

Choline positron emission tomography/computed tomography (CT) scans for pN+ detection in high risk patients were performed since pN+ cannot be predicted by conventional imaging techniques such as CT or magnetic resonance imaging. The detection of positive nodes precipitated an extended pelvic and retroperitoneal lymphadenectomy up to the duodenum, followed by radiotherapy three months after surgery when histology confirmed lymph node involvement.

For metastatic disease, most centers advocate systemic treatment although studies have shown an insufficient effect of even a combination of androgenic hormonal treatment and cytotoxic chemotherapy on the cancerous tissue.

This finding is in agreement with the results of many clinical studies showing no effect or a marginal effect on survival. These studies may show a statistically significant survival benefit, but its biological significance is most often limited with only a few months of lifetime gained in the context of grade three and four toxicities.

"Given these premises, we wanted to reevaluate the role for surgery in node positive and metastatic prostate cancer — singular bone metastases — in order to improve patients' quality of life and long-term survival," Dr. Stief said.

Although robust outcome data will require more years of follow-up, the prerequisite for an aggressive approach for pN+ prostate specific antigen (PSA) persistent or recurrent disease after a radical prostatectomy in non-metastatic cases is available when the PSA is greater than 2.

"Considering the dramatically improved long-term prognosis in pN+ patients when the prostate was removed vs. left in place, and reading the lacking efficacy of the existing medical approaches, we started offering an aggressive approach to young otherwise healthy patients with singular bone metastases," Dr. Stief said.

Similar to high risk pN+ cases, an extended pelvic and retroperitoneal lymphadenectomy up to the duodenum is performed, followed by radiotherapy three months after surgery when histology confirms lymph node involvement.

"In addition, we approach the bone metastases either by surgery or by radiotherapy/ Cyberknife® or by a combination of both," Dr. Stief said. "In fit patients, treat aggressive disease aggressively."