## RESEARCH HIGHLIGHTS

#### **TESTICULAR CANCER**

## RPLND an effective first-line alternative to chemotherapy

Men with nonseminomatous germ cell tumors (NSGCTs) who are at high risk of metastasis can benefit from retroperitoneal lymph node dissection (RPLND) as primary treatment, a recent study from Harvard Medical School suggests. "RPLND can offer a chance for cure and spare chemotherapy in the majority of these patients" claims lead author Stephen Williams.

# Just 3% of patients who underwent first-line RPLND were found to have systemic disease 77

The research team retrospectively identified 133 high-risk individuals—that is, those with >30% embryonal carcinoma, with or without lymphovascular invasion—who had undergone RPLND. Nodes were positive in just over half of these men.

The outcomes of dissections performed as primary treatment (n=76) were compared with those of surgery carried out post-chemotherapy (n=57). The most widely used chemotherapy regimen included bleomycin, etoposide and cisplatin. Average percentage of embryonal carcinoma was high; 75.3% for patients undergoing first-line RPLND and 71.2% for those whose nodes were removed after chemotherapy. At surgery, metastatic spread was detected in 49% and 61% of men, respectively. Just 3% of patients who underwent first-line RPLND were found to have systemic disease.

Similarly low rates of recurrence (about 8%), detected using tumor markers and CT, were reported for both sets of patients, indicating that RPLND alone is an effective approach to the management of high-risk NSGCTs. Williams *et al.* also found that primary RPLND involved less blood loss, a shorter operative time, and fewer postoperative complications than

post-chemotherapy surgery. The recent development of safer dissection techniques that reduce the risk of retrograde ejaculation add to its potential as a first-line treatment in testicular cancer. Williams concludes that "our findings highlight the importance of performing a meticulous dissection."

Sparing patients from unnecessary chemotherapy is another advantage of primary RPLND. Long-term complications linked to cisplatin-based treatment include cardiovascular disease and metabolic syndrome. Secondary malignancy associated with radiation exposure during post-chemotherapy follow-up CT imaging would also be avoided by employing this management strategy.

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**Original article** Williams, S. B. *et al.* Retroperitoneal lymph node dissection in patients with high risk testicular cancer. *J. Urol.* **181**, 2097–2101 (2009).

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