Intermittent androgen ablation is an effective secondary therapy for prostate cancer

Continuous androgen suppression is the most common secondary therapy for biochemical failure in patients who have undergone radiotherapy for localized prostate cancer, but can result in the recurrence of the tumor in an androgen-independent form. It has been suggested that intermittent androgen ablation (IAA) could delay the development of hormone resistance in prostate tumors, as well as having less-severe side effects than continuous hormone deprivation.

In a phase II study, researchers in Canada assessed the effects of IAA in 39 patients with biochemical failure after treatment with radiotherapy for prostate cancer. Patients were given the luteinizing-hormone-releasing hormone analog buserelin at 2-monthly intervals for 8 months, after which serum prostate-specific antigen and testosterone levels were assessed every 4–6 months. Another cycle of treatment was given if the patient's prostate-specific antigen level rose above 10 ng/ml. The median time between the first and second cycle was 20.1 months, dropping to 15.5 months between the third and fourth cycles. Four patients developed androgen resistance. The 5-year survival rate was 92.3%. Hot flashes were a common side effect. Although generally well tolerated, treatment did have an impact on patient's quality of life; however, with testosterone recovery between cycles, symptoms were alleviated.

The authors conclude that IAA is a safe and effective treatment, with a similar effect on prostate-specific antigen levels to continuous androgen ablation, but producing less-severe side effects. They also note the 66% saving in cost of treatment compared with continuous therapy.

Jim Casey

Original article Cury FLB *et al.* (2006) Intermittent androgen ablation in patients with biochemical failure after pelvic radiotherapy for localized prostate cancer. *Int J Radiat Oncol Biol Phys* **64**: 842–848

Chemoradiotherapy improves local disease control in early-stage laryngeal cancer

There is no standard of care for patients with early-stage laryngeal cancer, and current treatment options are often associated with poor

rates of local disease control. A recent retrospective analysis by Akimoto *et al.* has now shown that chemotherapy with concurrent radiotherapy can improve local disease control and voice preservation when compared with irradiation alone.

The authors reviewed the records of 63 patients with stage T2N0 laryngeal squamous-cell carcinoma who had undergone external-beam radiotherapy. Of these patients, 27 had also received concurrent chemotherapy with cisplatin, docetaxel, or both. Local response was evaluated 1 month after completion of therapy, and outpatient follow-up was continued for a median of 47 months. All patients who received chemoradiotherapy achieved a complete response, compared with 92% of patients who had undergone radiotherapy alone. Overall survival and disease-free survival rates were significantly higher in the chemoradiotherapy group ($P < 0.05$), and combined treatment was also associated with improved voice preservation. In the multivariate analysis, treatment method was the only variable to significantly impact on local disease recurrence ($P < 0.01$). There were no cases of toxicity-related treatment interruption among the patients who received chemoradiotherapy.

In summary, this retrospective study shows promising results for chemoradiotherapy in the treatment of early-stage laryngeal cancer. The authors recommend that a prospective trial be undertaken to establish an optimal chemoradiotherapy dose.

Alexandra King

Original article Akimoto T *et al.* (2006) Radiation therapy for T2N0 laryngeal cancer: a retrospective analysis for the impact of concurrent chemoradiotherapy on local control. *Int J Radiat Oncol Biol Phys* **64**: 995–1001

Paclitaxel and SU6668 synergistically inhibit vascular growth

Receptor tyrosine kinase inhibitors block the activity of angiogenic growth factors such as VEGF and platelet-derived growth factor. Taxanes have been shown to have potent antiangiogenic effects at subcytotoxic concentrations. Researchers in Italy investigated the combined effect of SU6668, a receptor tyrosine kinase inhibitor, and paclitaxel, on vascular growth and cellular populations of the vasculature such as