MEDICAL ONCOLOGY

Long-term androgen suppression improves survival

The use of radiotherapy and long-term androgen suppression has been shown to improve the overall survival of patients with locally advanced prostate cancer. Long-term androgen suppression, however, has been associated with reduced quality of life and can increase the risk of fatal myocardial infarction, fractures and metabolic syndrome. It has been proposed that short-term suppression for 6 months might lower these risks. In this context, the European Organisation for Research and Treatment of Cancer conducted a trial to determine whether short-term androgen suppression could maintain overall survival and quality of life.

A total of 970 men with localized prostate cancer were randomly allocated to receive 7 weeks of external-beam radiotherapy and 6 months androgen suppression with luteinizing hormone-releasing hormone and an antiandrogen agent ($n = 483$) or luteinizing hormone-releasing hormone for a further 2.5 years

($n = 487$). After a median follow-up period of 6.4 years, 132 patients who received short-term suppression died compared with 98 who received long-term suppression. Deaths due to prostate cancer were higher in the short-term group compared with the long-term group. The 5-year overall mortality was 15.2% in those receiving long-term suppression and 19.0%

for those with short-term suppression. Both groups experienced fatigue, insomnia, hot flashes and diminished sexual function, but these adverse effects were significantly greater in the long-term suppression group. The incidence of fatal cardiac events at 5 years was similar for both groups, as was the overall quality of life.

The combination of radiotherapy and 6 months of androgen suppression demonstrated inferior survival compared with radiotherapy and 3 years androgen suppression. The authors recommend “radiotherapy plus long-term androgen suppression for men with locally advanced prostate cancer who have no contraindicating coexisting conditions”.

Lisa Hutchinson

Original article Bolla, M. *et al.* Duration of androgen suppression in the treatment of prostate cancer. *N. Engl. J. Med.* **360**, 2516–2527 (2009).