PROSTATE CANCER

STRATIFYING SALVAGE RADIOTHERAPY UTILITY

A new report establishes a risk stratification tool to personalize recommendation of early salvage radiation therapy (SRT) in patients with biochemical cancer recurrence (BCR) following prostatectomy for prostate cancer.

PSA increase is detected in up to 30% of patients during prostatectomy follow-up monitoring. SRT can be curative but also result in toxic effects, such as incontinence and erectile dysfunction. Identifying optimal candidates for early SRT is important to avoid overtreatment in men with continuously indolent disease and lack of effectiveness in those who have undetected metastases at BCR.

Fossati et al. evaluated 925 men without lymph node metastasis who had received SRT at seven tertiary referral centres owing to rising or persistent PSA levels after prostatectomy. At a median follow-up duration of 8 years, 485 men had rising PSA levels and 130 men had distant metastases. The team used regression tree analysis, multivariate regression analysis and curve fitting to establish the risk stratification tool and investigate links between SRT PSA levels and the probability of 8-year metastasis-free survival (MFS). They found that PSA level before SRT was associated with distant metastasis (HR 1.01; P<0.0001). Of five risk stratification groups, only men in three groups had improved MFS owing to early SRT: those with low risk (undetectable PSA, Gleason score ≤ 7 , ≥pT3b), those with intermediate risk (undetectable PSA, Gleason score ≥ 8), and those with high risk (PSA persistence, Gleason score ≤7). Men with very low risk and those with very high risk did not have a clear oncological benefit from early SRT.

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ORIGINAL ARTICLE Fossati, N. et al. Impact of early salvage radiation therapy in patients with persistently elevated or rising prostate-specific antigen after radical prostatectomy. Eur. Urol. http://dx.doi.org/10.1016/j.eururo.2017.07.026 (2017)

FURTHER READING Seisen, T. *et al.* Could lead-time bias explain the apparent benefits of early salvage radiotherapy? *Nat. Rev. Urol.* **14**, 193–194 (2017)