

S27. Problems with PSA Screening: A Critical Review

Hans-Peter Schmid

Kantonsspital, St. Gallen, Switzerland

Prostate cancer is unique among malignant tumors due to its high prevalence and relatively slow natural history. Prevention is not yet possible because none of the firmly established risk factors advancing age, race and familial aggregation can be influenced. Cure can only be achieved in organ confined disease through radical treatment (prostatectomy, external beam irradiation, brachytherapy). The rationale for early detection, however, is not to diagnose more cancers but rather to reduce disease-specific mortality and to prevent morbidity from local problems (bleeding, urinary tract obstruction) and distant metastases.

Mass screening (population screening) is currently being evaluated in large prospective randomized trials in Europe (European Randomized Study of Screening for Prostate Cancer, ERSPC) and overseas (Prostate, Lung, Colon and Ovary Cancer Screening project, PLCO). Results should be available by the year 2008. To date, only one randomized study from Quebec City suggests a reduction in mortality in a screened population, but this trial was methodologically flawed and, thus, heavily criticised. In another prospective series, a decrease

in prostate cancer mortality following introduction of prostate specific antigen (PSA) screening in the federal state of Tyrol has been noticed. Overall, there is no scientific proof for the benefits of mass screening as of today. On the contrary, there is a considerable chance for over-diagnosis if PSA-driven screening policies are applied to asymptomatic men.

In the meantime, individual case finding (“opportunistic screening”) should be offered to men with a life-expectancy of at least 10 years according to the guidelines of the European Association of Urology (EAU) [1]. Patients should be well informed about the potential benefits and harms prior to PSA testing. In summary, the optimal strategy for early detection with PSA still remains unknown and will be a matter of debate for many years.

References

- [1] Aus G, Abbou CC, Pacik D, Schmid H-P, van Poppel H, Wolff JM, Zattoni F: EAU guidelines on prostate cancer. *Eur Urol* 40: 97-101, 2001.