

## **FOLLOW UP AFTER RADICAL PROSTATECTOMY**

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Prostate cancer represents an important health problem worldwide. It is rarely found in men aged < 50 years but the incidence rises rapidly thereafter. Therapeutic options for patients diagnosed with early prostate cancer include radiotherapy and watchful waiting; however for organ-confined disease, radical prostatectomy (RPE) potentially offers the best chance of cure. In the last 10 years, there has been a marked increase in the proportion of patients presenting with early disease (locally or locally advanced), undergoing RPE. As a result of the increased number of patients, who have received potentially curable RPE over the past decade, follow up is becoming of great importance and postoperative measurements of PSA levels have revolutionised it. Biochemical failure can be defined as persistent detectable levels of PSA after the operation or a PSA rise after a period of normalization. Overall, 30-35% of men who receive therapy of primary curative intent for early disease will experience PSA failure within 10 years, with the majority of events occurring within 5 years. While biochemical failure occurs in a large proportion of patients and represents the earliest evidence of disease persistence, the prognosis is widely variable and not all patients with relapsing disease have an equal risk of clinical progression and death due to prostate cancer. Indeed the 10 year disease-specific survival rate can be as high as 94-98%. It is important to identify the patients at risk of PSA biochemical failure after potentially curable therapy and it would be extremely important to distinguish the patients at risk of developing clinical recurrence following biochemical failure from those at lower risk. Predictors of progression such as disease stage, tumour grade, nodal status and preoperative PSA level are precised. Moreover, evidence from a number of recent studies indicates that the analysis of time to recurrence, PSA doubling time, PSA velocity and urinary PSA before and after massage may also be useful in predicting clinical progression and may allow a better identification of the recurrence site (local recurrence versus metastatic disease) and thus, the optimal treatment strategy such as local irradiation, hormone therapy or both. Considering that postoperative PSA evaluation gives the possibility of an early detection of biochemical progression, diagnostic procedures such as TRUS, bone scintigraphy and computed tomography appear to be of no added value and therefore are not necessary in most of the patients while controversies still exist on the role of TRUS guided biopsy of the anastomosis. In conclusion PSA (time to failure and doubling time) plays a fundamental role in the follow up after RPE and coupled with the patient's reaction to the rising PSA influence the choice of treatment and treatment strategy.