The Role of Digital Rectal Examination in the Management of Patients on Active Surveillance for Low Risk, Localised Prostate Cancer

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Editorial

In a retrospective review study, involving 231 patients who are on active surveillance for low risk, localised prostate cancer; it was noted that only 63 patients had Digital Rectal Examination (DRE) done during their follow up visits. In this study, the period of review was from 2008 to 2017. The overall outcomes for these patients are as follows: 125 remained on active surveillance; 74 went on to have radical treatment; 17 moved to either watchful waiting or hormone treatment and 15 died.

During this study, it was noted that only 63 patients had DRE during the entire period under review when they attend for their routine visit. The failure to carry out DRE did not seem to play a significant role in determining the outcome of these patients on active surveillance. However, there was regular PSA testing which happen every 3 to 4 months when patients entered active surveillance initially, later on increased to 6 monthly. The reason for this deduced by the study for this paucity of DRE in this cohort could either be due to the fact that a lot of the patients are seen by cancer nurse specialist who at the current time are not trained to carry out DRE. The other reason being when these patients were seen in by a member of the medical team, they simply forgot to do the DRE or check when it was last done.

According to UK’s national institute for clinical excellence (NICE CG 174 January 2014) guidelines [1]; According to NICE current guidelines (CG 175 January 2014), DRE should be done every 6-12 months in the first year of Active Surveillance (AS). In the second to fourth year, DRE should be done every 6-12 months and after five years, should be done every 12 months. It also qualified that DRE should be done a suitably experienced person with expertise and confidence in doing DRE.

The question thus arises if it is really necessary to carry it out every 6-12 months and can it influence the management decisions? It noticed that most patients were managed on based on adherence to the protocol outlined by NICE in terms of clinic visits, PSA check and timing of repeat biopsy. The most important key in the follow up appear to be their PSA kinetics, repeat MRI scan and biopsies were requested based on this. With the current tools available for follow up of these patients such as multi parametric MRI, template mapping/targeted prostate biopsies and ease of availability of PSA testing, it is has become obvious that decisions can be reached fairly easily without recourse to DRE.

A look at some available studies showed that most patient had intervention based on PSA kinetics rather than any other clinical parameters. Carter et al. [2] J Urol 2000 in a review of 81 patients on expectant management who was followed up for 24 months with PSA and DRE twice a year. Their disease was low volume and stage T1c. In this study despite carrying our DRE twice a year, the decision to intervene was based on PSA density, free PSA level and outcome of biopsy. 25 had disease progression and 13 had radical prostatectomy. 12 out of 13 were deemed cured because they had negative resection margins. Klotz Nat Clin Pract Urol 2006 [3], used the PSA doubling time (PSADT) of less than 3 years to decide disease progression. PSA level were checked 3 times in 6 months and those found to have DT of <3 years were offered radical treatment. Those without PSADT of <3 years were offered repeat biopsies at 1, 4, 7 and 10 years. In a series of 299 patients using this approach, the prostate cancer specific survival was 99.3% in 8 years. Stephenson et al. [4] Urology 2002 in an attempt to evaluate the importance of PSADT in predicting disease progression correlated the outcome of DRE to PSADT over certain period. In review of 104 patients...
followed up for 12 months found that those with PSADT of <48 months have a DRE correlation i.e. palpable disease (P<0.05). The presences of PSADT of <120 months consistently correlates with disease progression on DRE and on repeat biopsy, as well as presence of clinically significant clinical cancer.

Though DRE cannot accurately stage disease like an MRI scan, but when performed conscientiously by an experienced practitioner, DRE can provide good information on clinical stage of prostate cancer. This is even more important in cases where PSA kinetic has remained static; in such cases DRE can influence the decision to re-biopsy the prostate. So I think DRE can and does influence management decision for patients on active surveillance for low risk prostate cancer. DRE should be done at regular interval as stipulated by NICE and when there is significant rise in PSA.

References
1. NICE guidelines (CG175). Prostate cancer: Diagnosis and management. 2014.