Radiation Therapy for Localized Prostate Cancer

(Three dimensional conformal radiation therapy (3DCRT) combined with neoadjuvant hormone therapy (NHT))

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Prostate cancer has been increasing in Asian countries. For localized prostate cancer, there are many types of therapeutic options including radical prostatectomy, external beam radiation therapy, brachytherapy, hormone therapy and watchful waiting. Among these options, radical prostatectomy is preferable, because we are surgeons. However, radiation therapy has been indicated for the patients in several reasons. In our case, 3DCRT is indicated, when patients are over 75 years old or they have high risk factors for surgery, or they prefer radiation therapy. Protocol of such therapy is NHT by using LH-RH analogue plus non-steroidal anti-androgen for 6-8 months followed by 66 or 70 Gy 3DCRT. Our experience of 74 patients followed up during 24-108 months will be presented. 5-year biochemical relapse free survival rate was 82% with extremely low rate of side effect. This high relapse free survival is comparable to high-dose radiation therapy using 75 to 78 Gy, which were reported by many researchers. However, local control of high-risk prostate cancer, which is associated with high PSA, high Gleason score or high stage was not satisfactory. I would like to discuss about more improvement of treatment for the high-risk prostate cancer.