8. Future Prospective

In malignancies, it has been observed that these get detected at a stage when no significant treatment can be done except to prolong the life of the patient. So there is an urgent need of developing molecular biomarkers for the detection of all kind of cancers. It has been well documented that the identification of epigenetic alterations is a promising strategy to attain this goal. These alterations seem to occur more frequently in early stages of the disease which might allow for a more efficient DNA based detection of prostate cancer (Sidransky, 2002). Contrary to genetic alterations, CpG methylation is a potentially reversible modification. Demethylation of GSTP1 is feasible and it is accompanied by restored protein expression in prostate cancer cell lines (Lin et al., 2001). Thus therapeutic intervention intended to reverse the methylation status of several key genes involved in prostate carcinogenesis might improve current treatment options. As such identification of aberrant promoter methylation seems to play a promising role in prostate cancer detection and management. Future studies should be based on further testing for epigenetic-based cancer therapeutics. Identification of DNA hypermethylation can be an important component in the armoury of diagnostics. If all males above the age of 50 are thoroughly screened for methylation in tumor suppressor genes and oncogenes along with the polymorphisms in DNA repair genes, then the disease can be resurrected at the first stage itself. The present study will assist the future researchers in their endeavour for designating new biomarkers having the potential to fight against this fatal disease.