

## **Abstract**

Prostate cancer affects the male population and radiation therapy plays a role in treating this type of cancer. Brachytherapy is a common type of treatment for prostate cancer. Low-dose brachytherapy uses radioactive seeds placed within the prostate to deliver dose directly to the cancer. Brachytherapy seeds are placed within the patient's prostate in an invasive procedure, which are then used during treatment to make sure the radiation is going to the correct area and not affecting the surrounding healthy tissue. Prostate cancer can affect any male, and the symptoms can be asymptomatic or symptomatic. However, males are encouraged to get screenings conducted yearly during the patient's annual checkup. For diagnosing prostate cancer, at yearly check-ups if an abnormality is detected, further tests and imaging will be needed to determine the stage and grade of cancer. While history of prostate cancer can affect a certain male population, anyone is susceptible to getting cancer. There are three main different types of brachytherapy that can be used to treat prostate cancer. Treatment of brachytherapy involves getting radiation five days a week for several weeks, usually involves around 30-40 treatments. The outcome of low-dose brachytherapy for prostate cancer is excellent if the patient is willing to go through radiation treatment, and the occurrence of the cancer reappearing is slim to none.

*Keywords:* radiation therapy, brachytherapy, low-dose, prostate cancer