AbstractID: 6962 Title: Verification of Source Stepping Uniformity of a Intravascular Beta Afterloader in Non-linear Conditions

An assessment of the stepping of an intravascular beta afterloader to handle stepping in vessels with extreme curvature has been made. This was performed by creating an acrylic phantom with different degrees of curvature. A P-32 beta source was placed in the acrylic piece with a sheet of radiochromic film placed underneath the phantom. The afterloader is checked on a daily basis (on treatment days) with an acrylic phantom to see if any gap of hot spot was created in the stepping process. However, this is done in a linear pathway, which is sometimes not the case in a clinical situation. This new phantom will be used along with the linear phantom in daily quality assurance and after each source exhange.