

A calibration jig was developed for determining the total source activity and its distribution along a  $^{32}\text{P}$  source designed for the endovascular irradiation. The  $^{32}\text{P}$  source was 27 mm in length and 0.3 mm in diameter and was imbedded at the end of a Ni-Ti wire. The distribution of the source activity as well as its total activity was calculated using an iterative method, which makes use of the measured Radiochromic film data. The radial dose-rate distribution was also measured with radiochromic film and calculated by assuming both a uniform and non-uniform source activity distributions. The results showed that a better agreement was achieved between the measured and calculated data if the nonuniformity of the source activity was taken into account.