There is no generally accepted standard for the optimal timing of post operative dosimetry in conformal prostate brachytherapy. We report dosimetric analyses and the effect of timing based upon CT and orthogonal film evaluation for 10 unselected patients implanted with either ^{125}I or ^{103}Pd. Within 2 hours following implantation, patients underwent a CT scan and the first of 4 sequential sets of orthogonal films obtained on days 0, 3, 14 and 28 post-implant. The implanted seeds seen on orthogonal films acted as markers for temporal changes in prostate dimensions, and the standard deviation of each dimension was used as input in an ellipsoidal volume calculation. Dimensional contraction from day 0 to day 28 averaged 11.3% in the superior-inferior direction, 8.5% in the AP/PA direction, and 2.5% in the right-left lateral direction. This translated into a volume change of 20.9% (range 11.6 - 31.6%) determined by the ellipsoid method. The half-life for edema resolution was 10.6 ± 1.8 days (range 8.6 - 14.3 days). However, variability in the extent of edema and its rate of resolution makes it futile to define a single point in time as the most accurate indicator of implant quality. Nevertheless, we conclude that day 0 represents the optimal time since dosimetric evaluation at that time maximizes the information content of that single measurement (edema is at or near its greatest extent), minimizes patient discomfort and inconvenience (a catheter is already in place), and provides prompt closure of the learning loop and as such, hopefully will result in improved implantation techniques and results.