Purpose: Recent RTOG trials recommended CTV definition for post-prostatectomy radiation therapy. Part of CTV anterior border has fixed relationship to pubic symphysis and other part of the CTV doesn't adjacent to bone and is affected by the movement of rectum and bladder. Either pelvic bones or surgical clips alignment is commonly practiced in IGRT, because either indicates part of CTV position. In this study we are investigating the differences between these two setups, since clips movement relative to bone may imply target deformation. **Material and methods:** 20 patients' verification images during prostate bed IMRT will be analyzed. The data of 6 patients who finished more than half of treatment are presented in this submission. 2D KV orthogonal images in Varian OBI system is used for patient setup. Pubic arch match in AP images is applied for Sup-Inf and Rt-Lt while symphysis match in lateral images for Ant-Post setup. CBCT is performed for the first 3 fractions and weekly thereafter to check rectum and bladder preparations. After the treatment, surgical clips are retrospectively matched in Offline Review of Varian Aria system. The differences between bony and clips alignment are recorded. **Results:** The differences between bony and clips matches over 6 patients are 0.0 ± 0.1cm, 0.0 ± 0.2 cm and 0.2 ± 0.4cm in Rt-Lt, Sup-Inf and Ant-Post directions, respectively. The largest differences are found in Ant-Post direction with 0.7 ± 0.4 cm being recorded for one patient. Sup-Inf and Rt-Lt show random variations with smaller magnitudes. CBCT images indicate the rectum preparations cause CTV posterior border deformation and subsequently clips shifts relative to bone. Bladder fillings contribute to CTV Sup-Inf variations. **Conclusions:** Initial data suggest larger CTV deformation in Ant-Post than other directions due to soft tissue movement. Statistically sufficient data will be needed for asymmetric PTV margins to account for this deformation in IGRT.