Results: The junction of two fields could be confirmed regardless of the degree of enlargement according to the distance between the cranial isocenter and the image plate, with the cranial field as the half beam. The verification images of the 20 patients were measured with a computed radiography reader. Eighteen patients showed a setup error images of the 20 patients were measured with a computed radiography reader. (CAPSULA XL II, Fujifilm, Japan). The field junction was photographed three times to confirm its accuracy and reproducibility. Two-millimeter or smaller gaps or overlaps were considered setup error. If a 2 mm or greater error was specifically reproduced, the center was moved again through 2D simulation.

Conclusion: For craniospinal irradiation patients, treatment in the supine position rather than in the prone position is advantageous for setup stability and airway security. The proposed technique can maintain the homogeneity of the dose because it can accurately confirm the junction of the fields using an image plate.

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A study of prostatic calculi: in patients receiving radical radiotherapy for prostate cancer
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Purpose or Objective: Image guided radiotherapy (IGRT) allows to reduce uncertainty margin from clinical to planning target volume due to better geometric accuracy. Geometric accuracy of Linac-based stereotactic IGRT is reported to be within 2-3 mm and Kilo-voltage cone beam computed tomography (Kv-CBCT) is generally considered as the gold standard for treatment verification. However inter/intra-observer variability in image evaluation may exist. Aim of this report was to conduct a preliminary analysis to quantitatively determine the magnitudes of such inter-observer variations

Material and Methods: Kv-CBCT images were obtained for all patients who underwent stereotactic radiotherapy treatments. They were analyzed both on-line (before treatment delivery) and off-line by two different Radiation Oncologists (RO, M.M. and V.M.) with at least one year of experience in CBCT images verification. Translational displacements in anteroposterior (x), mediolateral (y), and craniocaudal (z) directions were recorded for all verifications and discrepancies were 0.43, 0.55, and 0.50 mm, respectively. By systematic and random differences were 0.89, 1.87, and 0.67 mm and random differences were 1.2 versus 1.9 mm, respectively p=0.01). On-line verification of CBCT took a mean time of 4 minute and 14 seconds (range 58 sec - 12 min 25 sec). No significant difference in magnitudes of inter-observer variability was observed according to time spent for verification