

Fig. E-1

Diagrammatic illustration of the measurement of screw position in the inverted triangle configuration. **Fig. E-1A** Anteroposterior radiograph. **Fig. E-1B** Lateral radiograph. H_1H_2 = femoral head diameter in anteroposterior radiograph. N_1N_2 = femoral neck diameter in anteroposterior radiograph. S1 = inferior screw in anteroposterior radiograph and middle screw in lateral radiograph. S2 = middle screw in anteroposterior radiograph and anterior screw in lateral radiograph. S3 = superior screw in anteroposterior radiograph and posterior screw in lateral radiograph. $HAHP$ = femoral head diameter in lateral radiograph. $NANP$ = femoral neck diameter in lateral radiograph. Screw-tip subchondral purchase = black lines with arrows on both ends. Screw-shaft purchase over head = $H_1S_{1T}/H_1H_2 + H_2S_{2T}/H_1H_2 + H_2S_{3T}/H_1H_2 + H_P S_{PH}/H_A H_P + H_A S_{AH}/H_A H_P$. Screw shaft purchase over neck = $N_1S_{1N}/N_1N_2 + N_2S_{2N}/N_1N_2 + N_2S_{3N}/N_1N_2 + N_P S_{PN}/N_A N_P + N_A S_{AN}/N_A N_P$.

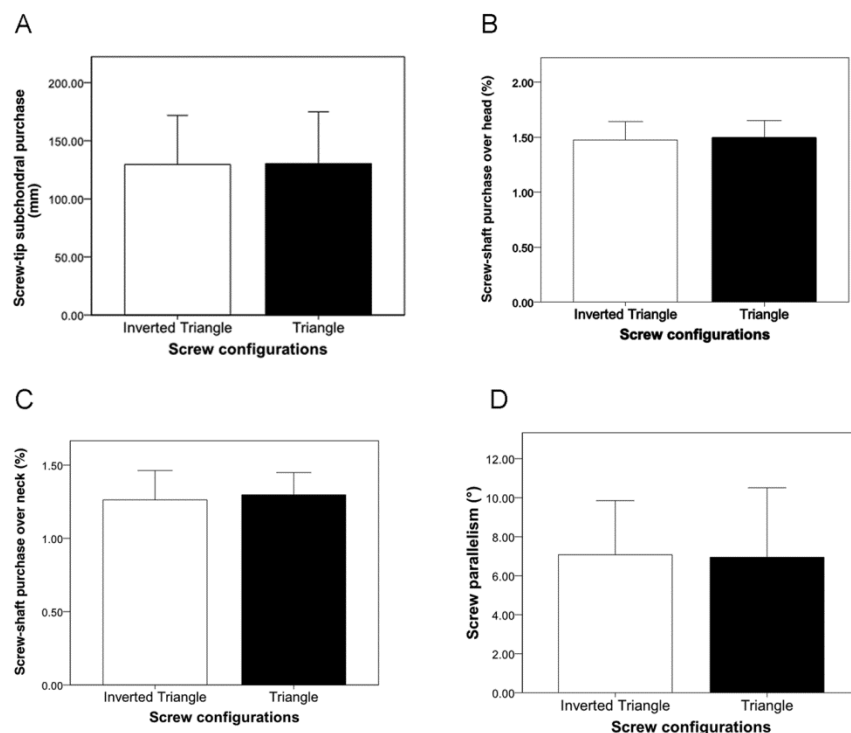


Fig. E-2

Comparison of various postoperative radiographic outcomes for different screw configurations. The data are presented as the mean and the standard deviation. **Fig. E-2A** Screw-tip subchondral purchase. **Fig. E-2B** Screw-shaft purchase over head. **Fig. E-2C** Screw-shaft purchase over neck. **Fig. E-2D** Screw parallelism. The p values are based on an independent two-sample t test.

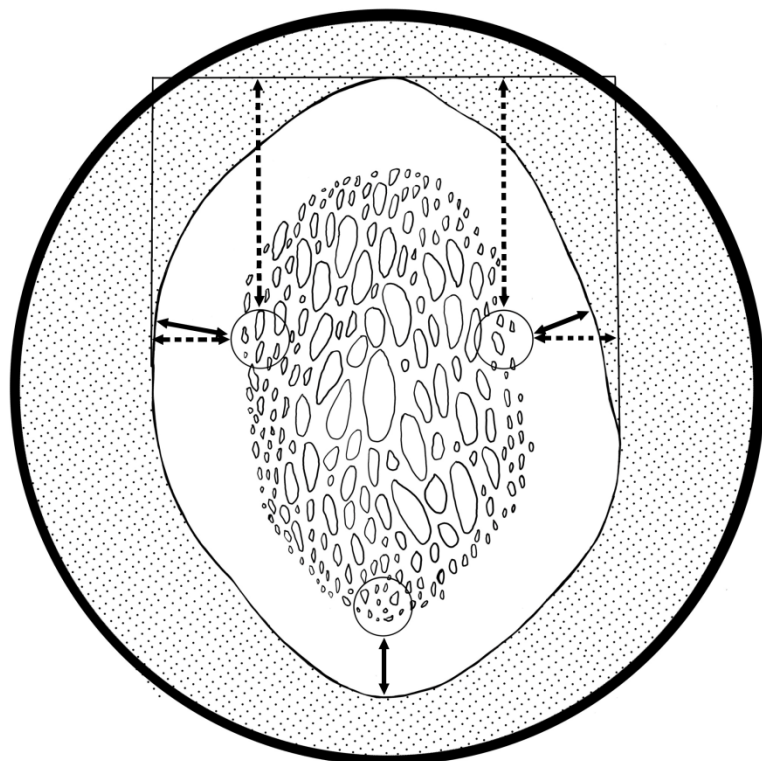


Fig. E-3

Cross-sectional diagrammatic illustration of the femoral head, femoral neck, and screws in the inverted triangle configuration. The femoral head cortex is indicated by the outermost black circle; the femoral neck cortex, by the ovoid shape; and the screws, by the inner circles. The lines with arrows over both ends indicate the true distance between the screw and the femoral neck cortex, and the dotted line with arrows over both ends indicates the measured distance between the screw and the femoral neck cortex.