Objectives: To evaluate the push-out bond strength of two surface treatments of a glass fiber and zirconia ceramic post. Materials and methods: Sixty samples were fabricated and divided into two main groups according to the type of esthetic post indicated for maxillary central incisor: glass fiber post and zirconia ceramic post. Each group was subdivided to two subgroups according to the type of bond strength test either between post and root or between post and core. Each subgroup was further subdivided into three classes according to surface treatment: no treatment (control), sandblasting in conjunction with silica particles then silane coating (SB+SIC+SC), etching using hydrofluoric acid then silane coating (E+SC). For the subgroups of the bond strength between post and root, each class was subdivided into two subclasses according to the location of the sample (cervical or apical). Results: Bond strength to root canal or resin core were affected by the type of post, glass fiber post recorded significant higher bond strength than zirconia ceramic. Surface treatment recorded higher values for bond strength, SB+SIC+SC gave higher bond strength than E+SC. Cervical section recorded significant higher bond strength than apical section. Conclusions: Glass fiber posts recorded higher bond strength than glass ceramic post to both root canal and resin core. Surface treatments increase bond strength for glass fiber and zirconia ceramic posts to both root canal and resin core. SB+SIC+SC gave higher bond strength than E+SC. Bond strength at the cervical section is higher than at the apical section.