

Cementum is more resistant to resorption than bone, and it is for this reason that orthodontic tooth movement is possible. When a tooth is moved by means of an orthodontic appliance, bone is resorbed on the side of the pressure, and new bone is formed on the side of tension. Thus degenerative processes are much more easily effected by interference with circulation in bone, whereas cementum with its slow metabolism (as in other avascular tissues) is not damaged by a pressure equal to that exerted on bone. The difference in the resistance of bone and cementum to pressure may be caused by the fact that bone is richly vascularized, whereas cementum is avascular. However, in careful orthodontic treatment, cementum resorption is minimal or absent, but bone resorption leads to tooth migration. Resorption of bone as well as of cementum may be anticipated. On the side toward which the tooth is moved, pressure is equal on the surfaces of bone and cementum.