Hypercementosis is an abnormal thickening of cemen- tum. The excessive deposition is circumscribed and surrounds the root like a cuff. The prong like extensions of cementum provides a larger surface area for the attaching fibers; thus a firmer anchorage of the tooth to the surrounding alveolar bone is assured. Hypercementosis of cementum in nonfunc- tioning teeth is characterized by a reduction in the num- ber of Sharpey's fibers embedded in the root. Localized forms can be seen in benign cementoblastoma, florid cemento-osseous dys- plasia, acromegaly, calcinosis and some forms of arthritis. In some cases an irregular overgrowth of cementum can be found, with spike like extensions and calcification of Sharpey's fibers and accompanied by numerous cementicles. In localized hypertrophy a spur or prong like exten- sion of cementum may be formed (Fig. The same type of embedded calcified round bodies frequently are found in localized areas of hyperplastic cementum (Fig. Extensive deposition of cementum is occasionally associated with chronic periapical inflammation. This type of hypercementosis can occasionally be observed on many teeth of the same dentition and is, at least in some cases, the sequela of injuries to the cementum (Fig.Localized hypercementosis may sometimes be observed in areas in which enamel drops have developed on the den- tin. 7.18) occasionally is irregular and sometimes contains round bodies that may be calcified epithelial rests. The cementum is thicker around the apex of all teeth and in the furcation of multirooted teeth than on other areas of the root. Hypercementosis is associated with a large number of neo- plastic and non-neoplastic diseases. Hypoplasia or aplasia of cementum is of rare occur- rence. The hyperplastic cementum covering the enamel drops (Fig. Such knob like projections are designated as excementoses. They too develop around degenerated epithelial rests. It may extend around the entire root of the nonfunctioning teeth or may be localized in small areas. This thickening is found in embedded and in newly erupted teeth. Cemental hyperplasia can reach almost three fold to the range of 200-215 mm thickness with progressing age.Generalized thicken- ing is seen in Paget's disease. This condi- tion frequently is found in teeth that are exposed to great stress. A thickening of cementum is often observed on teeth that are not in function. It may be diffuse or circumscribed. It may affect all teeth of the dentition, be confined to a single tooth, or even affect only parts of one tooth. It is associated with hypophosphatasia. 7.17). 7.19). 7.20).