It has been generally recognized that the radiological appearances of cysts and tumors related to an embedded tooth are similar. However, based on their clinical experience, Abrams et al. pointed out that there was a difference between the two lesions at the attachment point to the embedded tooth. To investigate this difference, we conducted a study employing the radiographs of patients who visited Nihon University Dental Hospital at Matsudo and were pathologically defined as having a cyst or tumor. Using radiographs of these patients, we investigated the attachment point to the embedded tooth, and expressed the results as the proportion of the attachment point to the embedded tooth root length. The study was carried out in 100 patients with cysts (87 dentigerous cysts and 13 odontogenic keratocysts), and 27 patients with benign tumors (24 ameloblastomas and three adenomatoid odontogenic tumors). Prior to treatment based on the numerical results, the distribution of the results was examined. Thus, we evaluated several methods of examining the distributions, and found the best method to be discriminant analysis. The results showed that the discriminated boundary value (from the cemento-enamel junction) was 0.38 for the embedded tooth root length. The cases showing a boundary value of less than 0.4 for the cemento-enamel junction were judged to be cysts, and those showing a value of 0.4 or more were judged to be benign tumors. The rate of misjudgement was 28% in the cyst group and 33.3% in the benign tumor group.
Differential diagnosis between dentigerous cyst and benign tumor with an embedded tooth. Atsushi Ikeshima, Yoshiyasu Tamura. Journal of oral science. 2002. It has been generally recognized that the radiological appearances of cysts and tumors related to an embedded tooth are similar. However, based on their clinical experience, Abrams et al. pointed out… (More).

11 Dentigerous Cyst (Follicular Cyst)

- It arises in the follicular region of unerupted permanent tooth.
- It develops after fluid accumulates between the remnants of enamel organ and the tooth crown.
- Usually adolescents, 20-40 years old.
- Most common sites: mandibular third molar, maxillary canine, maxillary third molar.
- Unilocular radiolucency, well-defined, often corticated, associated with the crown of an unerupted and displaced tooth.
- Large cysts tend to expand the outer plate (usually buccally).

Dentigerous cysts are cysts that, similar to the eruption cyst, arise when the stellate reticulum associated with the formation of the crown of the tooth breaks down. From: Current Therapy In Oral and Maxillofacial Surgery, 2012. Related terms Dermoid cysts, unlike epidermoids, also contain epidermal appendages such as hair follicles, sweat, and sebaceous glands. The sebaceous glands are responsible for the secretion of sebum, which imparts the characteristic appearance of the dermoids on MRI. It is a common misconception that dermoid cysts contain adipose tissue; they do not. Lipocytes originate from the mesoderm, and dermoid cysts (by definition) originate entirely from the ectoderm. If a dermoid cyst did contain adipose tissue it would be termed a teratoma.