

## Cystic change of embedded supernumerary teeth

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Clinical records and radiographs of 166 embedded supernumerary teeth were investigated to find out the rule of cystic change of supernumerary teeth and its relationship to malocclusion, and to present the methods of therapy. This study showed that 66% of the crowns of the supernumerary teeth were showed different sizes of circular photic shades, but only 35% were proved to be cystic change by biopsies. Therefore, if the diagnosis can be made in these cases with indication of operation, the extraction of the supernumerary teeth must be done as soon as possible. (Int Chin J Dent 2004; 4: 78-79.)

**Key Words:** cystic change, embedded supernumerary teeth, pathology, X-ray.

### Introduction

Embedded supernumerary teeth are often taken place in the grown process.<sup>1-3</sup> In order to understand the rule of cystic change of supernumerary teeth and its relationship to malocclusion, 100 patients in our clinic are analyzed by radiograph and pathology.

### Materials and Methods

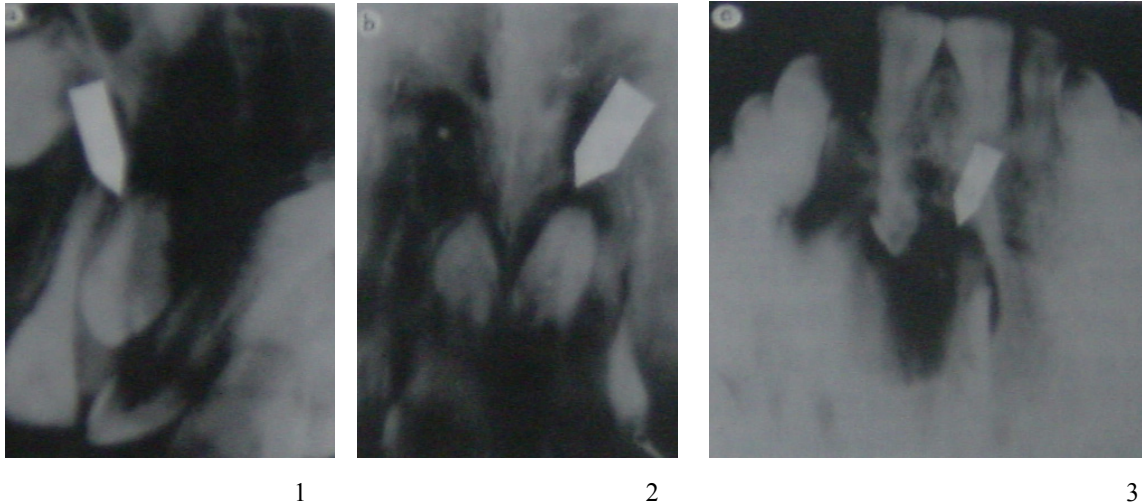
The data were collected from 1995 to 1999 in Shanghai Xuhui Dental Hospital. There are totally 100 patients with embedded supernumerary teeth, including 75 male and 25 female. The age is arranged from 6 to 50- year old, including 7% under 6-year old, 79% from 7 to 12-year old, and 14% above 14-year old.

Each case was analyzed by radiograph and pathology.

### Results

There are totally 166 supernumerary teeth in these 100 patients. All are located in the maxillary bone. The 42% patients have one supernumerary tooth, 52% have two supernumerary teeth, and 6% have 3 supernumerary teeth or more.

The radiograph results are shown in Figs. 1 to 3. For the case that its shape of crown of supernumerary tooth is larger than 2 mm, it means there is a high risk for becoming cyst. In this study, there are totally 66 cases whose shape is larger than 2 mm by radiograph, while, 35 cases of them are the cyst proven by pathology.



**Fig. 1.** The shade of crown of supernumerary tooth less than 2 mm.

**Fig. 2.** The shade of crown of supernumerary tooth larger than 2 mm.

**Fig. 3.** Dentigerous cyst.

## Discussion

The reason for the happening of supernumerary teeth is not very clear now. However, supernumerary teeth will result in cyst and other pathological change in the maxillary bone. Therefore, if the diagnosis of supernumerary teeth can be made with indication of operation, especially for the shape of crown of supernumerary tooth larger than 2 mm, the extraction surgery should be done as soon as possible.

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