



## Supernumerary Teeth

### Alternative Names

Hyperdontia

### WHO International Classification of Diseases

Diseases of the digestive system

### OMIM Number

187100

### Mode of Inheritance

Autosomal dominant

### Description

Supernumerary teeth, or hyperdontia, are the existing of additional teeth to the normal series in the dental arches. It occurs with both primary and permanent teeth, but it is more common with permanent teeth. The rarest form of hyperdontia is the molar type. Hyperdontia can be classified as eumorphic or dysmorphic. Eumorphic supernumerary teeth have the same morphology of the normal teeth, whereas dysmorphic ones are small and conical or tuberculate. Many supernumerary teeth never erupt and these may delay eruption of nearby teeth or cause other dental problems. Delayed in tooth loss, or eruption are possible signs of hyperdontia. Usually, diagnosis can be performed after radiographic assessment. The incidence of hyperdontia ranges from 0.1% to 3.8% depending on the population. In the Caucasian population, the incidence of supernumerary teeth ranges from 1-3%, and the highest frequency has been found in Native American tribes.

### Molecular Genetics

As hyperdontia is more common among the relatives of an affected child than the general population, it is suggested that genetic factors play a role in its occurrence. However, the anomaly does not follow a simple Mendelian pattern. Also, it is believed that environmental factors along with hereditary factors are combined to cause the condition.

### Epidemiology in the Arab World

#### Lebanon

Cassia et al (2004) illustrated the presence of five mandibular incisors in four patients originating from the same extended family. The brothers and sisters of the four patients did not show any abnormalities in tooth number and the parents were partially or completely edentulous. The pedigree revealed that the four patients had consanguineous parents. Diagnosis was based on clinical examination and radiography. The first patient was a 25-year-old male who had five normal, well individualized mandibular incisors. The second patient was a 22-year-old female and she had five distinct mandibular incisors with normal roots. The identification of the supernumerary tooth in the first and second patients was difficult because there was no significant difference between the incisors. The third patient was a 24-year-old female with five separate, crowded mandibular incisors. The fourth patient was a 22-year-old male. He had five normal, well-aligned mandibular incisors. Both the third patient and the fourth patient had on the left side partial coronal fusion of two incisors. This fusion could be attributed to the decreased available space caused by the presence of supernumerary tooth and the proximity between tooth germs. Because of the inheritance pattern of five mandibular incisors in the studied family, Cassia et al. (2004) suggested the involvement of a single gene bearing a recessive mutation.

### References

Cassia A, El-Toum S, Feki A, Megarbane A. Five mandibular incisors: an autosomal recessive trait? Br Dent J. 2004; 197(6):307-9.

### Contributors

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