Anodontia and Supernumerary teeth

Developmental disturbance in number of teeth developed.

by Michelle Dicu
Anodontia

A genetic disorder characterized by the congenital absence of all primary or permanent teeth. It is associated with the group of skin and nerve syndromes called the ectodermal dysplasias.

**TYPES**

- **Complete**: all teeth missing, rare genetic disorder associated with a syndrome known as hereditary ectodermal dysplasia
- **Partial anodontia/ Hypodontia**: more common and most commonly occurs (listed in order of occurrence) with the permanent maxillary lateral incisors, third molars, and mandibular second pre-molars.
- **Oligodontia**: lack of development of 6 or more teeth
- **Pseudoanodontia**: when teeth are absent clinically because of impaction or delayed eruption
- **False Anodontia**: when teeth have been exfoliated or extracted
Anodontia
Supernumerary Teeth

Defined as those in addition to the normal series of deciduous or permanent dentition. They may appear as a single tooth or multiple teeth, unilaterally or bilaterally, erupted or impacted and in mandible or maxilla. Also known as Hyperdontia.
Etiology

Anodontia
❖ Lack of initiation within the dental lamina results in the absence of a single tooth (partial) or multiple teeth (complete), producing anodontia.
❖ Associated with the syndrome of ectodermal dysplasia, because many parts of the tooth are indirectly or directly of ectodermal origin.
❖ Can also result from endocrine dysfunction, systemic disease, and exposure to excess radiation, such as that in radiation therapy used with cancer treatment, and may cause disruption of occlusion and esthetic problems.

Supernumerary teeth
❖ These extra teeth are initiated from the dental lamina and have a hereditary etiology.
❖ Certain areas of both dentitions commonly have supernumerary teeth, such as between the maxillary central incisors (mesiodens), distal to the maxillary third molars (distomolar or “fourth molar”), and in the premolar region (perimolar) of both dental arches.
❖ They are smaller than normal, and most are accidentally discovered on radiographic examination.
❖ Cleidocranial dysostosis
How does it impact patients dentally?

**Anodontia**
Patients may need partial or full dentures, bridges, or implants to replace the missing teeth. If severe, it can result in disruption of the complete development of the jaws.

**Supernumerary**
These extra teeth may be either erupted or non-erupted and in both cases may cause dentition displacement, crowding, and delayed eruption to the adjacent teeth, as well as occlusal disruption; thus, removal by surgery is often necessary.
Role of dental team focusing on dental hygiene care

Anodontia

- Providing a treatment plan that is best suited for the patient depending on amount of bone and teeth present.
- Restoring the oral cavity for proper function and esthetics can include bridges, implants, or partial/full dentures.

Supernumerary teeth

- Always taking a full set of x-rays or panoramic upon seeing a new patient for a full diagnosis.
- Extra teeth may be left alone and observed over time if they’re not causing any problems.
- Managing proper oral hygiene due to increased susceptibility of calculus in hard to reach areas.