



## **MICRO & MACRODONTIA**

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# WHAT IS MICRODONTIA?

Is A Condition In Which One Or More  
Teeth Appear Smaller Than Usual

## Types Of Microdontia:

- True Generalized Microdontia
- Relative Generalized Microdontia
- Localized Microdontia





# TRUE GENERALIZED MICRODONTIA

- All Teeth Are Smaller Than Normal
- Very Rare Condition
- In Pituitary Dwarfism And Down's Syndrome.
- Effects Of Chemotherapeutic And Radiation Treatment During The Tooth Development Age



Growth retardation  
(dwarfism)



ADAM



# RELATIVE GENERALIZED MICRODONTIA

- Normal Or Slightly Smaller Than Normal Teeth
- Not A Real Microdontia, Rather An Illusion
- Teeth May Appear Relatively Small When A Person Inherits The Jaw Size From One Parent (Large Jaw) And The Teeth Size From The Other Parent (Small Teeth)

# LOCALIZED MICRODONTIA

- Common Condition
- Only One Tooth Is Affected
- Affects More Often Maxillary Lateral Incisor (Peg Shaped Crown) Or Third Molars
- The Cause Could Be Related To Facial Hemi Atrophy, Incidence Of Supernumerary (Extra) Tooth And Progeria





# CONSEQUENCES AND DENTAL IMPLICATION

- Generalized Spacing-poor Appearance
- Decreased Ability To Chew Tough Food

This Is Not A Major Problem, But With Generalized Small Teeth, One Would Not Be Able To Chew On Tough Food.

# TREATMENT

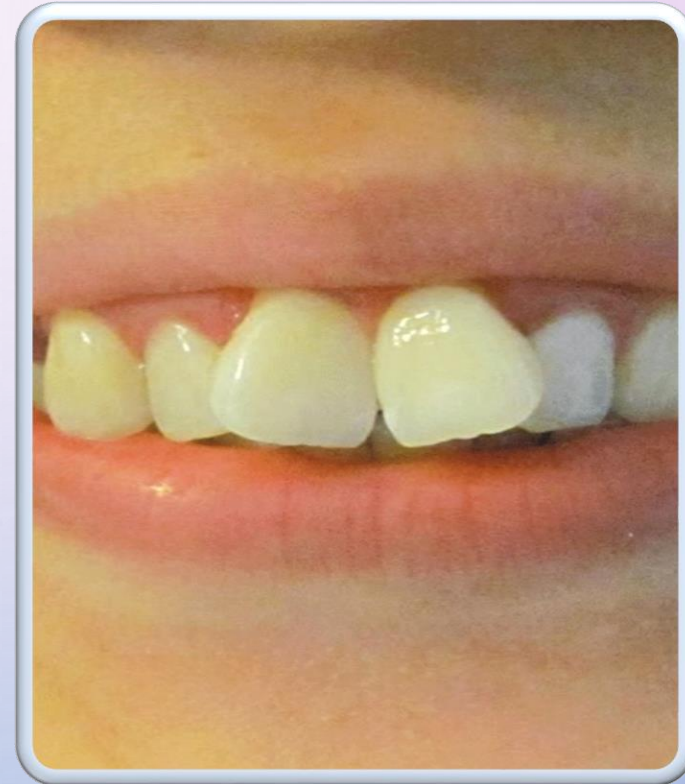
- Unerupted Microdonts May Require Surgical Removal To Prevent The Formation Of Cyst
- Erupted Microdonts, Peg Laterals Especially, May Cause Cosmetic Concern. Such Teeth May Be Restored To Resemble Normal Sized Teeth, Typically With Composite Build Ups Or Crowns
- Orthodontics May Be Required In Severe Cases To Close Gaps Between The Teeth

# WHAT IS MACRODONTIA?

**Is A Condition When Teeth Are Larger Than Normal**  
**Opposite Of Microdontia**  
**Also Called As Megalodontia Or Megadontia**

## Types Of Macrodontia

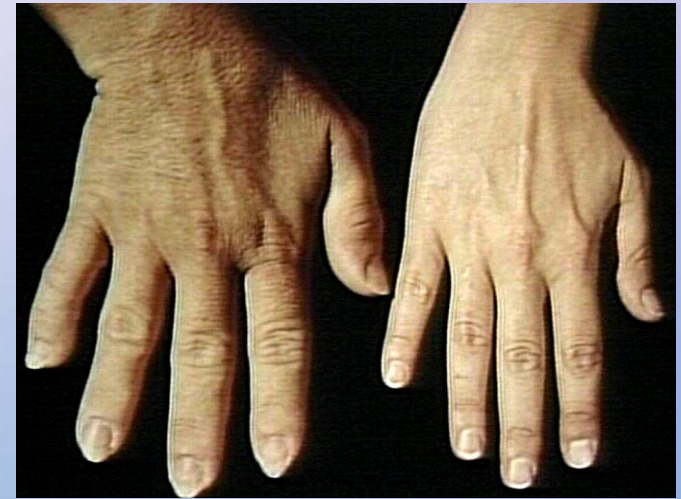
- True Generalized Macrodontia
- Relative Generalized Macrodontia
- Localized Macrodontia





# TRUE GENERALIZED MACRODONTIA

- All Teeth Are Larger Than Normal
- In Pituitary Gigantism, Otodontal Syndrome And Hemi Facial Hyperplasia
- Very Rare Condition



# RELATIVE GENERALIZED MACRODONTIA

- More Common
- Normal Or Only Slightly Larger Than Normal Teeth Crowded In A Small Jaw
- Teeth Appear Abnormal Because Of Illusion
- This Condition Also Called Pseudomacrodonitia
- It Can Happened Because Of Genetics



# LOCALIZED MACRODONTIA

- Uncommon Condition
- Unknown Etiology
- Usually Seen With Mandibular Third Molar
- Can Also Be Seen In Incisors, Canines, Second Premolar





# CONSEQUENCES AND DENTAL IMPLICATION

- **Appearance**

Having A Single Large Tooth Or An Entire Dentition Of Large Teeth Can Be An Unpleasant Sight.

- **Lack Of Space Of Eruption**

Having Large Teeth In A Normal Or Relatively Smaller Jaw Will Result In Lack Of Space Of Eruption, Leading To Problems Of Crowding, Impaction, And Even Cyst Formation In Unerupted Teeth

# TREATMENT

- NOT ALL CASES REQUIRE TREATMENT

- CONTOURING (ENAMELOPLASTY)

PORTIONS OF AN OVERSIZED TOOTH CAN BE SHAVED OFF

CONTOURING HAS ITS LIMITS. IF TO SHAVE TOO MUCH OF AN ENAMEL AWAY, DENTIN AND DENTAL PULP ARE IN RISK

- ORTHODONTICS

HELPS TO CORRECT MALOCCLUSION CAUSED BY MACRODONTIA

BRACES OR OTHER ORTHODONTIC APPLIANCE ARE USED IN ORDER TO CREATE SPACES FOR THE LARGER TEETH

- EXTRACTION

NOT PREFERRED TYPE OF TREATMENT, BUT MIGHT BE NECESSARY

WHEN A PATIENT EXPERIENCES CONSTANT JAW JOINT PAIN CAUSED BY MACRODONTIA AND HE CAN NOT BENEFIT FROM CONTOURING OR ORTHODONTICS

THE LARGE TOOTH CAN BE REMOVED AND REPLACED WITH PROSTHETIC

# ROLE OF DENTAL HYGIENE TEAM

- Tooth Abnormalities such as Micro and Macrodontia Can Present A Diagnostic Challenge.
- Dental Hygienists Need To Be Able To Recognize These Abnormalities In Order To Accurately Document Them In The Patient Record.
- In Addition, Many Of These Alterations Can Impact Patients' Oral Health, So Their Risk Factors Must Be Noticed And Addressed In Their Treatment Plans.



# REFERENCES

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