Evidence Based Dentistry Rounds Pediatrics

Group 7B-1

11/28/2020

Rounds Team

- Group Leader: Dr. Rossi
- Specialty Leader: Dr. Hodgeson
- Project Team Leader: D4 Jesus Echezarreta
- Project Team Participants: Alex Orzepowski; Omar Karim; Gabriella Andrie

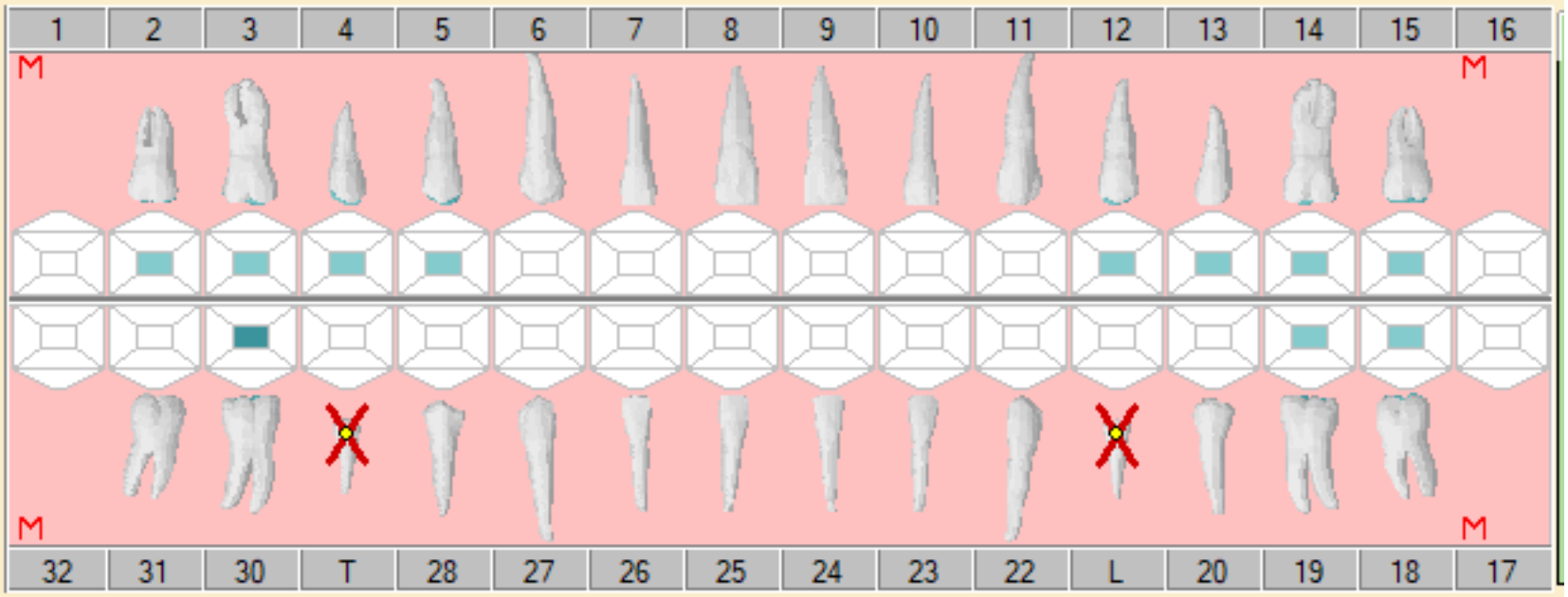
Patient

- Age
- Gender- Male
- Ethnicity- AA
- Chief Complaint
- Additional pertinent information

Medical History

- Current & past:
  - Conditions- Asthma
  - Medications- Albuterol PRN

Dental History



Radiographs

- Panoramic image not yet taken but is necessary for comprehensive evaluation

Radiographs

BWX

Radiographic Findings

- 1 slide summarizing pertinent radiologic findings
- Illustrate with radiograph and/or other graphics as needed

Clinical Findings

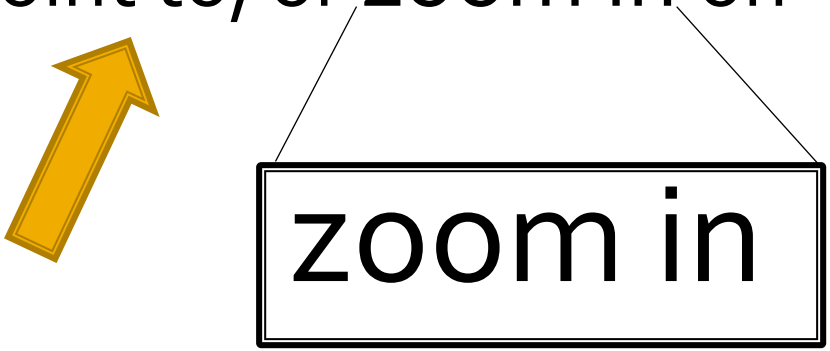
- 1 slide describing all clinical findings
- Clinical photos 1-2 slides
  - Relevant extraoral &/or intra-oral views
- Photos of casts 1-2 slides
  - Mounted on articulator
  - Same views as intraoral photos
    - Occlusal maxilla, mandible
    - Open, closed
      - Anterior, lateral
      - In occlusion, excursions
    - Show excursions from posterior to molar view

Specific Findings

- List findings specific to the Rounds discussion, 1 slide
- To enhance viewing, include close-ups of clinical photos, cast photos, radiographs, add slides as needed

Periodontal Charting

- Ensure that the periodontal charting is readable.
- Highlight, surround, point to, or zoom in on areas of interest.



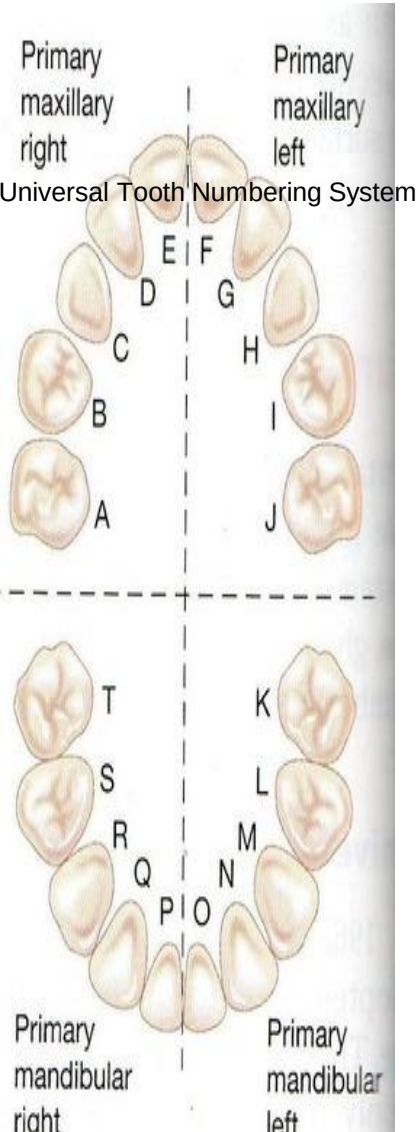
Diagnosis

- Diagnosis pertaining to Rounds discussion, 1 slide

Problem List

- 1 slide
- Include graphics as needed

How are Teeth Numbered?

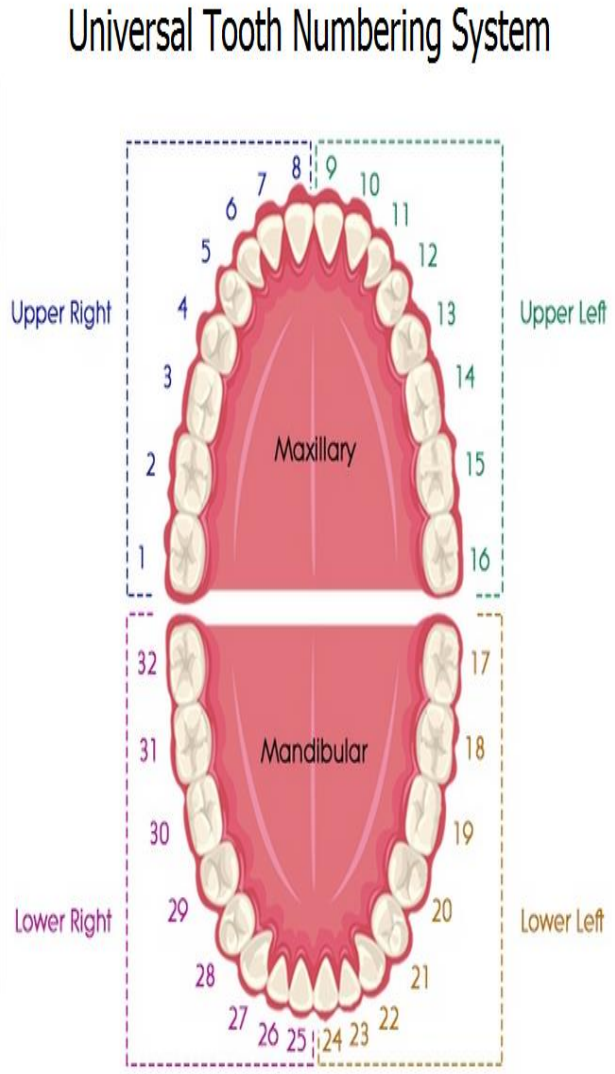


Primary Dentition:
Teeth are labeled using letters starting in the upper right quadrant, ending in the lower right quadrant (A to T)

Supernumerary Teeth
An S is added after the the letter of the tooth that is adjacent to the extra tooth.
Ex: DS

Permanent Dentition:
Teeth are labeled using numbers starting in the upper right quadrant, ending in the lower right quadrant (1-32)

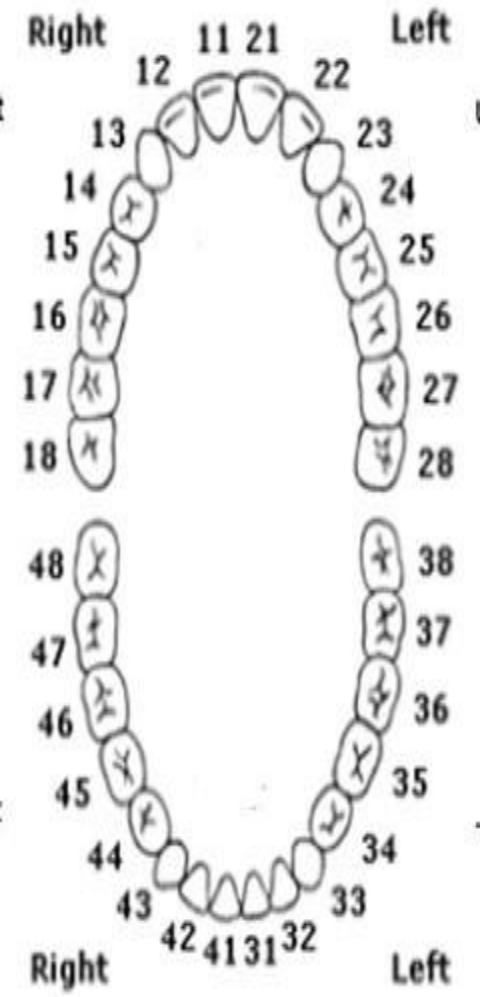
Supernumerary Teeth
A value of 50 is added to the number of the tooth that is adjacent to the extra tooth.
Ex: 68
(Tooth 18+50)



"Identifying Supernumerary Teeth." *Identifying Supernumerary Teeth | AmeriDenti Billing*, AmeriDentiLLC, www.ameridenti.com/resource-identifying-supernumerary-teeth.html.

Different Numbering Systems

FDI Notation



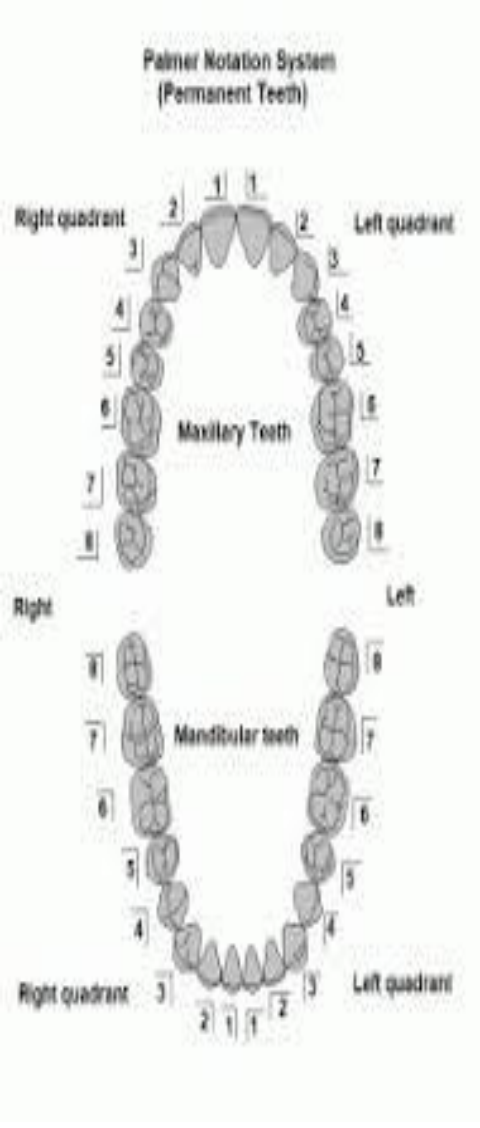
Permanent Dentition
Associates specific teeth by two digits. The first digit relates to the quadrant (1-4). The second digit relates to tooth position in relation to the midline. 1 being closest to midline - 8 being farthest from midline (third molars).

Primary Dentition
Uses the same method, only the digit related to quadrants changes from 1-4 to 5-8. The second digit also only goes up to 5, not 8.

Permanent Dentition
Distinguishes teeth by labeling the quadrant, then teeth are numbered (1-8) going from the midline to posterior teeth (third molars).

Primary Dentition
Uses the same method, only instead of numbers, letters A-E are used.

Palmer Notation



WHAT ARE SUPERNUMERARY TEETH?

- **DEFINITION**-SUPERNUMERARY TEETH ARE DEFINED AS ANY ODONTOGENIC STRUCTURE FORMED FROM THE TOOTH GERM THAT IS IN EXCESS OF USUAL IN ANY REGION OF THE DENTAL ARCH.

- -MAY BE SINGLE OR MULTIPLE
- -UNILATERAL OR BILATERAL
- -MORE COMMON IN MALES (2:1)
- -1-4% OF THE POPULATION
- STRONG LINK TO GENETIC SYNDROMES
- -MORE COMMON IN PERMANENT DENTITION
- -PERMANENT MAXILLARY CENTRAL INCISORS (MESIODENS) ARE THE MOST COMMON FOLLOWED BY FOURTH MOLARS IN BOTH ARCHES (REFERRED TO AS DISTODENS)

- -CAUSE COMPLICATIONS SUCH AS CROWDING OR CYST FORMATION, DELAYED ERUPTION, DISCOMFORT, DIFFICULTY CHEWING, AS WELL AS IMPACTED TEETH.

Other times there are…

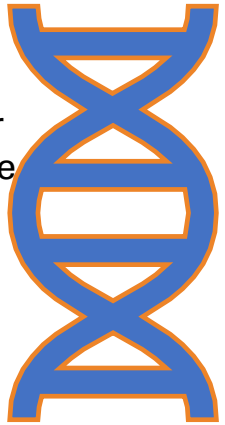
Missing teeth

-referred to as hypodontia, tooth agenesis, or congenitally missing teeth.
-developmental failure of 6 or fewer teeth
-most common dentofacial malformation in humans

- Most common are upper lateral incisors, wisdom teeth, and second premolars.
- More serious consequences than supernumerary teeth because disrupts function of the dentition to a greater extent than supernumerary teeth do.
- Treatment and restoration of dentition is more complicated

  -malocclusion
  -shifting
  -esthetics
  -jaw support

CAUSES & TREATMENT



The cause of supernumerary teeth isn't entirely clear but has been strongly linked to genetic factors. These factors include several autosomal dominant conditions such as cleidocranial dysplasia, Ehler-Danlos syndrome, Cleft lip and palate, and Gardner syndrome.

-Other causes that are hypothesized deal with environmental factors such as hyperactivity of the dental lamina during tooth development.

Treatment:

-early detection is the most important
-extraction for cosmetic and functional problems

D3 PICO

- **Clinical Question:**

PICO Format

P:

I:

C:

O:

PICO Formatted Question

Clinical Bottom Line

Search Background

- **Date(s) of Search:**
- **Database(s) Used:**
- **Search Strategy/Keywords:**

Search Background

- **MESH terms used:**

Article 1 Citation, Introduction

- Citation: Authors, Title, Journal, Date, Volume, Page Numbers.
- Study Design:
- Study Need / Purpose:

Article 1 Synopsis

- 1-2 slides
- Method
- Results
- Conclusions
- Limitations

Article 1 Selection

- 1 slide
- Reason for selection
- Applicability to your patient
- Implications

Article 2 Citation, Introduction

- Citation: Authors, Title, Journal, Date, Volume, Page Numbers.
- Study Design:
- Study Need / Purpose:

Article 2 Synopsis

- 1-2 slides
- Method
- Results
- Conclusions
- Limitations

Article 2 Selection

- 1 slide
- Reason for selection
- Applicability to your patient
- Implications

Levels of Evidence

☐ **1a** – Clinical Practice Guideline, Meta-Analysis, Systematic Review of Randomized Control Trials (RCTs)
☐ **1b** – Individual RCT
☐ **2a** – Systematic Review of Cohort Studies
☐ **2b** – Individual Cohort Study
☐ **3** – Cross-sectional Studies, Ecologic Studies, "Outcomes" Research
☐ **4a** – Systematic Review of Case Control Studies
☐ **4b** – Individual Case Control Study
☐ **5** – Case Series, Case Reports
☐ **6** – Expert Opinion without explicit critical appraisal, Narrative Review
☐ **7** – Animal Research
☐ **8** – In Vitro Research

Double click table to activate check-boxes

Strength of Recommendation Taxonomy (SORT)

☐	**A** – Consistent, good quality patient oriented evidence
☐	**B** – Inconsistent or limited quality patient oriented evidence
☐	**C** – Consensus, disease oriented evidence, usual practice, expert opinion, or case series for studies of diagnosis, treatment, prevention, or screening

Double click table to activate check-boxes

Conclusions: D3

How does the evidence apply to this patient?

- Consider/weigh:
  - Literature
  - Group Leader & Specialist experience
  - Patient circumstances & preferences

Based on the above considerations, how will you advise your D4?

Conclusions: D4

Based on your D3's bottom line recommendations, how will you ***advise*** your patient?

How will you ***help*** your patient?

Discussion Questions

THANK YOU