

What is Nasmyth's Membrane & Dentigerous Cysts?

OPAL THOMAS

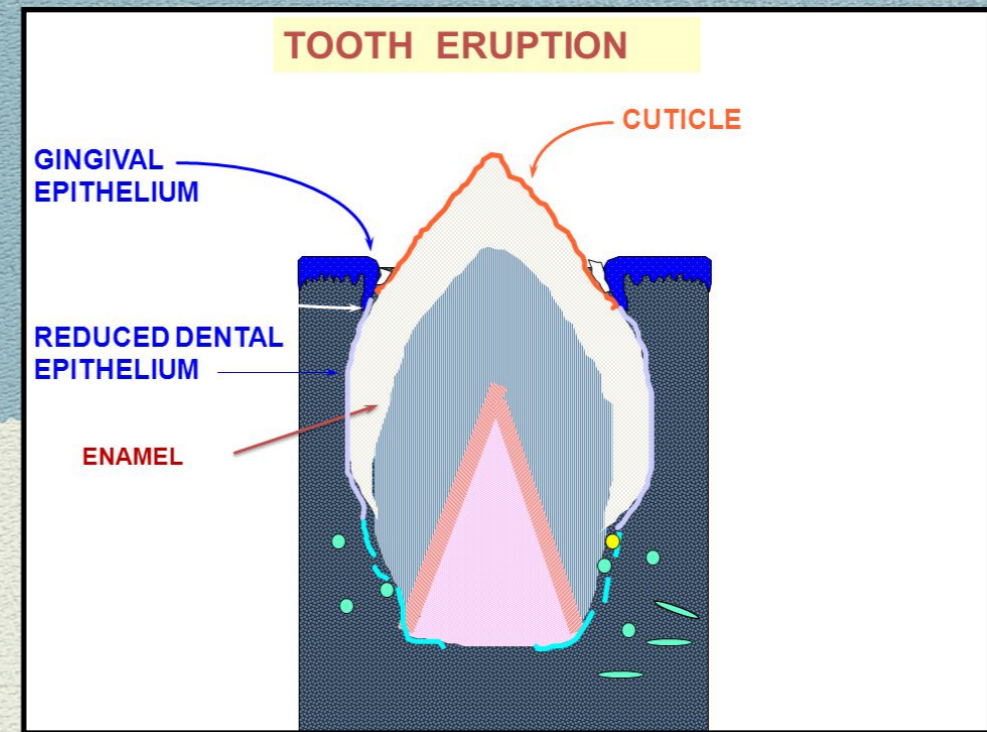
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NASMYTH'S MEMBRANE

- GREEN-GRAY RESIDUE MAY FORM on NEWLY ERUPED TEETH of BOTH DENTITIONS
- CONSISTS of REE , ORAL EPITHELIUM & DENTAL CUTICLE [AMELOBLAST] on NEWLY- FORMED ENAMEL SURFACE

PRIMARY ENAMEL CUTICLE OR NASMYTH MEMBRANE

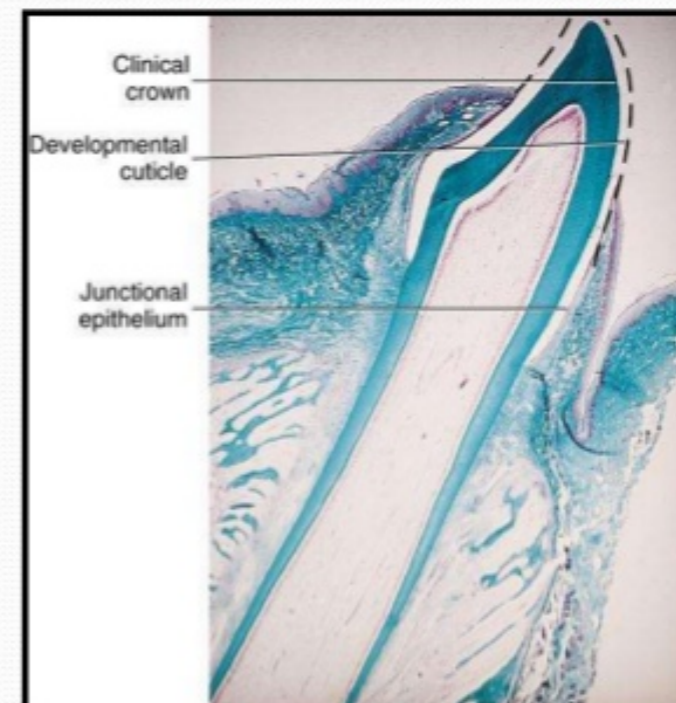
- Ameloblast cell degenerates following formation of enamel rod. The final act of ameloblast cell is the secretion of a membrane covering the end of the enamel rod. This membrane covers the entire crown of newly erupted tooth but is probably soon removed by mastication and cleaning



ENAMEL CUTICLE

- It is delicate membrane called Nasmyth's membrane or primary enamel cuticle.

ERUPTION



What is Nasmyth's Membrane?

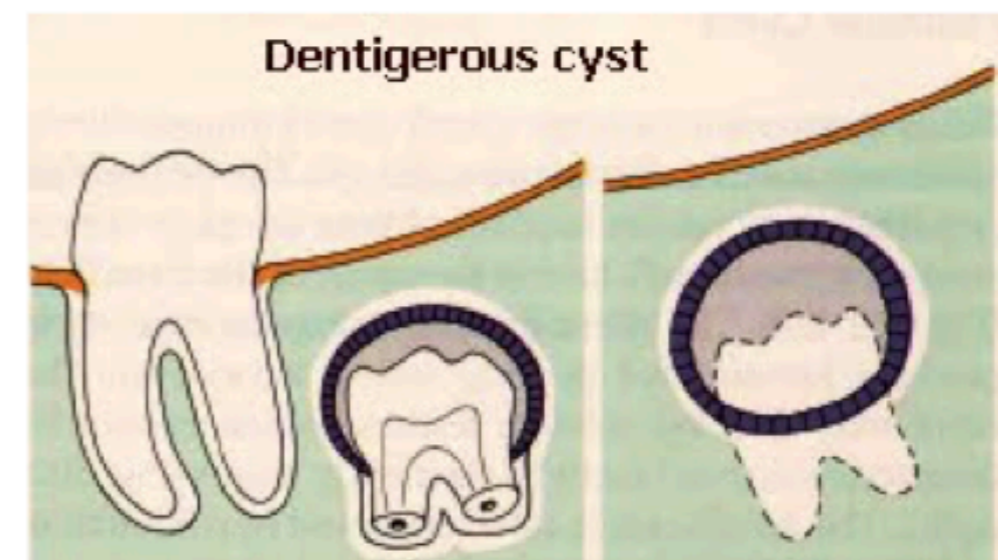
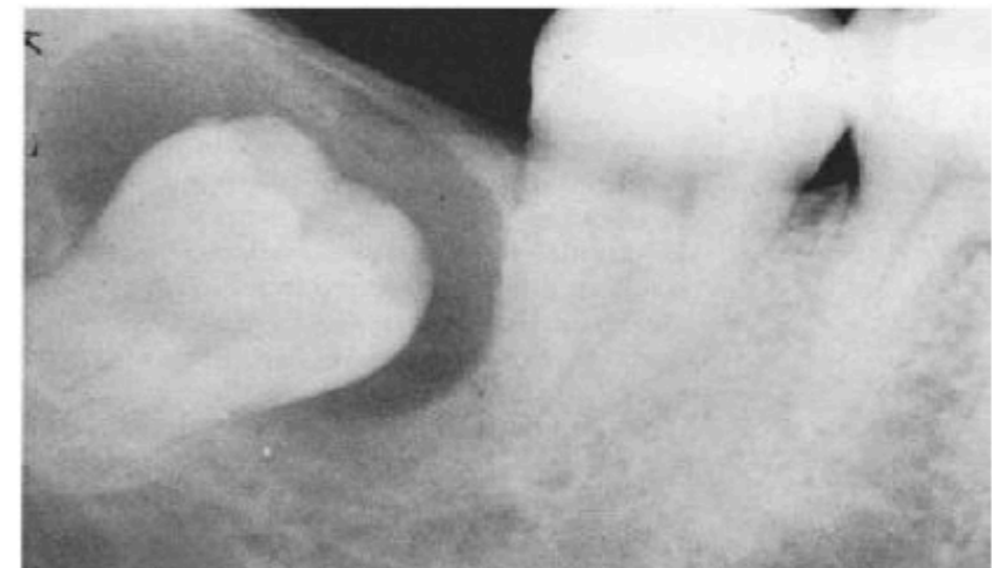
Extrinsic stain that may form on newly erupted teeth of both dentitions.

- Green-gray residue consisting of fused tissue of the Reduced Enamel Epithelium (REE) and oral epithelium, as well as the dental cuticle placed by ameloblasts (enamel secreting cells).
- Nasmyth's Membrane easily picks up stain from food debris.
- Usually wears off with chewing and proper brushing.



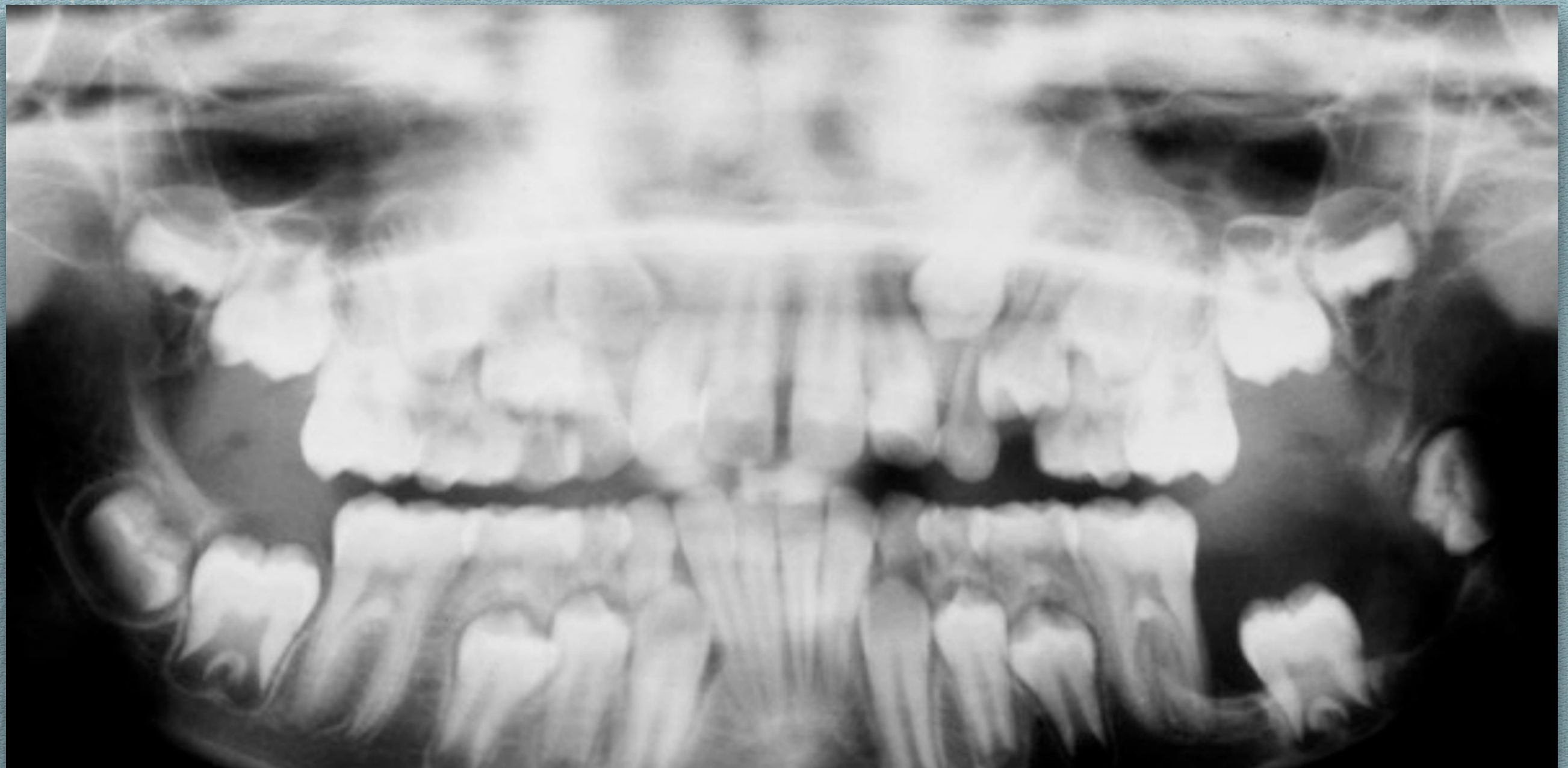
What is Dentigerous Cyst

- A dentigerous cyst or follicular **cyst** is an odontogenic cyst associated with the crown of an unerupted (or partially erupted) tooth.
- The **cyst** cavity is lined by epithelial cells derived from the reduced enamel epithelium of the tooth forming organ.
- This initially asymptomatic cyst forms most commonly around the crown of impacted or developing permanent third molars.





DENTIGEROUS CYST
EXTRAORAL PRESENTATION
LOWER AREA of the FACE is ASYMMETRICAL

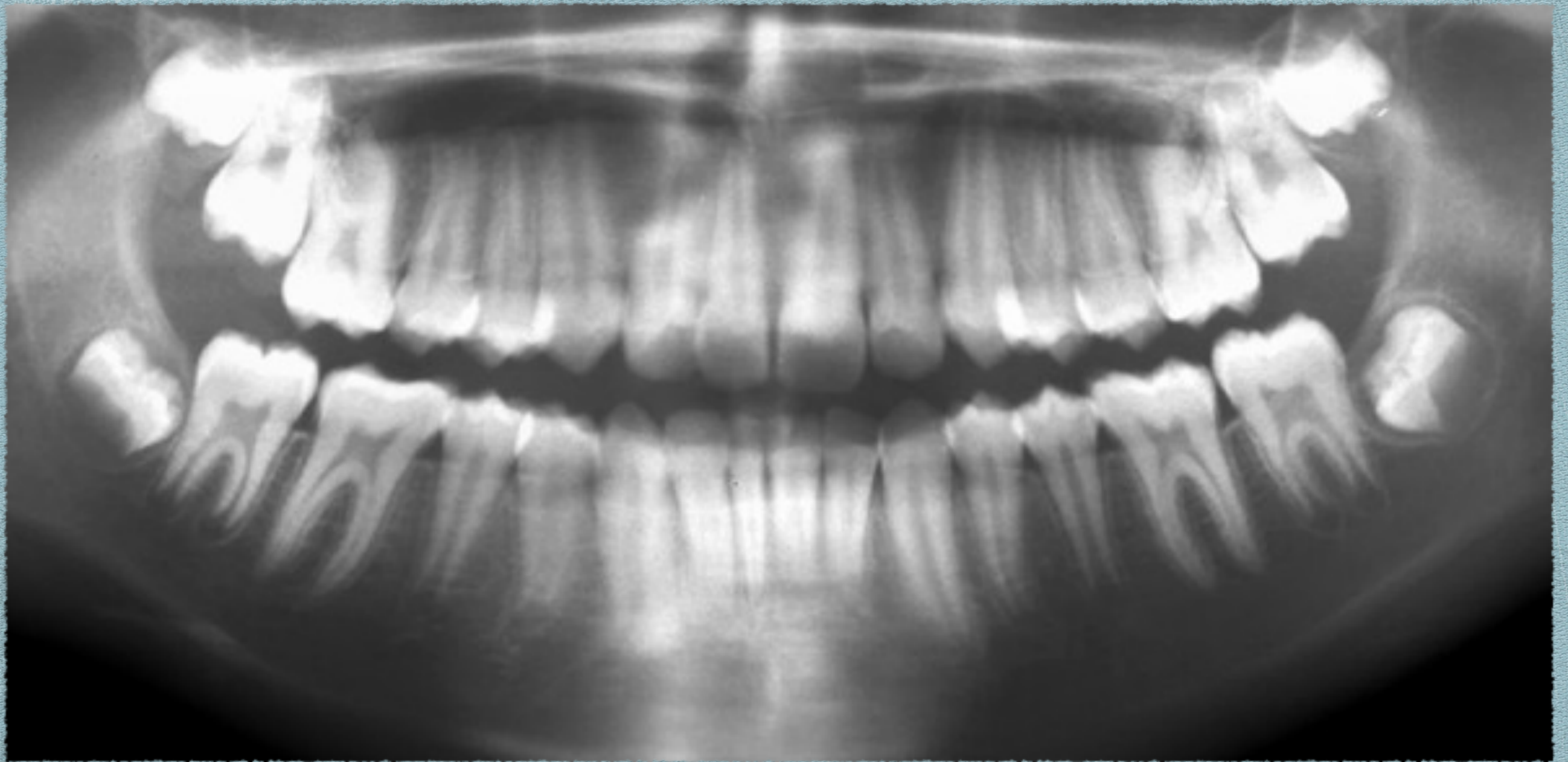


RADIOGRAPH - MIXED DENTITION

RADIOLUCENCY on the MANDIBLE
CYSTENCASING AFFECTED TOOTH #18



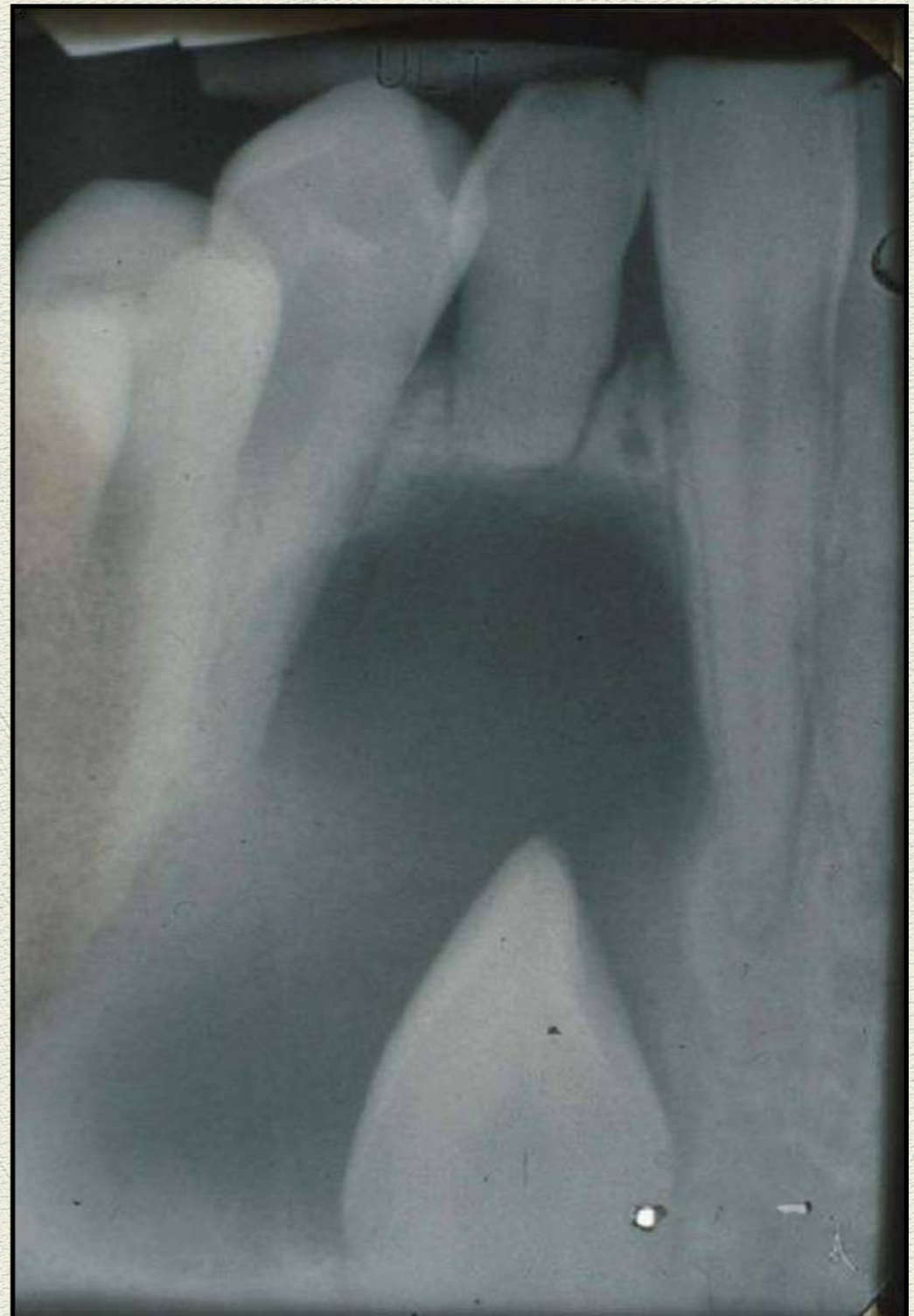
TX: INCISION/DRAINAGE
OPENED SPACE MAINTAIN with a PROSTHETIC
CYST 'may' REFORM



OPG—1-year postoperative complete disappearance of the lesion with 17 and 18 in normal anatomic position

PERMANENT DENTITION

Clinical Presentation Dentigerous cyst in Adult- Maxillary



Dentigerous cyst presenting on a periapical film as a well defined unilocular lucency enveloping the crown of an impacted mandibular canine and resorbing the root of an overlying tooth.



DENTIGEROUS CYST [ERUPTION CYST]

- ◆ APPEARANCE of a PARTIALLY ERUPTED TOOTH:

- FLUCTUANT
- COLOR BLUE
- VESICLE -
- GINGIVAL LESION
- NO TREATMENT

Eruption Cyst

- If a dentigerous cyst appears on a partially erupted tooth, it is considered an **eruption cyst**.
- Appears as fluctuant, blue, vesicle-like gingival lesion.
- Disintegrates with eruption of the tooth and no further treatment is needed.



Nasmyth's Membrane & Dentigerous Cyst Recap...

- *Dentigerous cysts are the **second most common** type of odontogenic cyst, which is a fluid-filled sac that develops in the jaw bone and soft tissue.*
- *They form over the top of an unerupted tooth, or partially erupted tooth, usually one of your molars or canines.*
- *Dentigerous cysts are benign, they can lead to complications, such as infection,*
- *Dentigerous cysts AKA Eruption Cyst*
- *Nasmyth's Membrane: Fused REE, Oral Epithelium & Dental Cuticle*

DENTAL HYGIENIST'S ROLE

- ◆ **BE FAMILIAR WITH INTRA/EXTRA ORAL & RADIOGRAPHIC PRESENTATION**
- ◆ **DISTINGUISH the DIFFERENCES BETWEEN ODONTOGENIC CYSTS**
- ◆ **...WILL DETERMINE TX.**

REFEFERCES

<https://www.healthline.com/medical-team>

[Eur J Dent.](#) 2015 Oct-Dec; 9(4): 599–602.

doi: [\[10.4103/1305-7456.172619\]](#)

PMCID: PMC4745245

PMID: [26929702](#)

Dentigerous cyst in a young child

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