LAINEY FOSTER, RDH, BS

FACULTY CALIBRATION

CALCULUS DETECTION & TREATMENT CLASS DETERMINATION

Columbus State Community College

SEPTEMBER 6TH, 2024
5:00 - 6:30PM

HALEON

KETTENBACH DENTAL
Simply intelligent

Crest + Oral-B

You're AMAZING

Course Objectives

Faculty will:

- Discuss importance of faculty calibration.
- Review CSCC Treatment Classifications (A, B, C, D) protocol per the Clinic Manual.
- Discuss common issues and/or concerns with student treatment classification.
- Review proper instrumentation and methodology for the TU17 explorer and 11/12 explorer.
- Review faculty expectations for the Calculus Detection Competency and calculus detection during scale checks.
- Participate in hands -on activity utilizing five ModuPro Typodonts and activity sheet to test their treatment class and calculus detection proficiency.
- Collaborate with other faculty members to compare and discuss findings following hands -on activity.

Goals for CSCC DHY

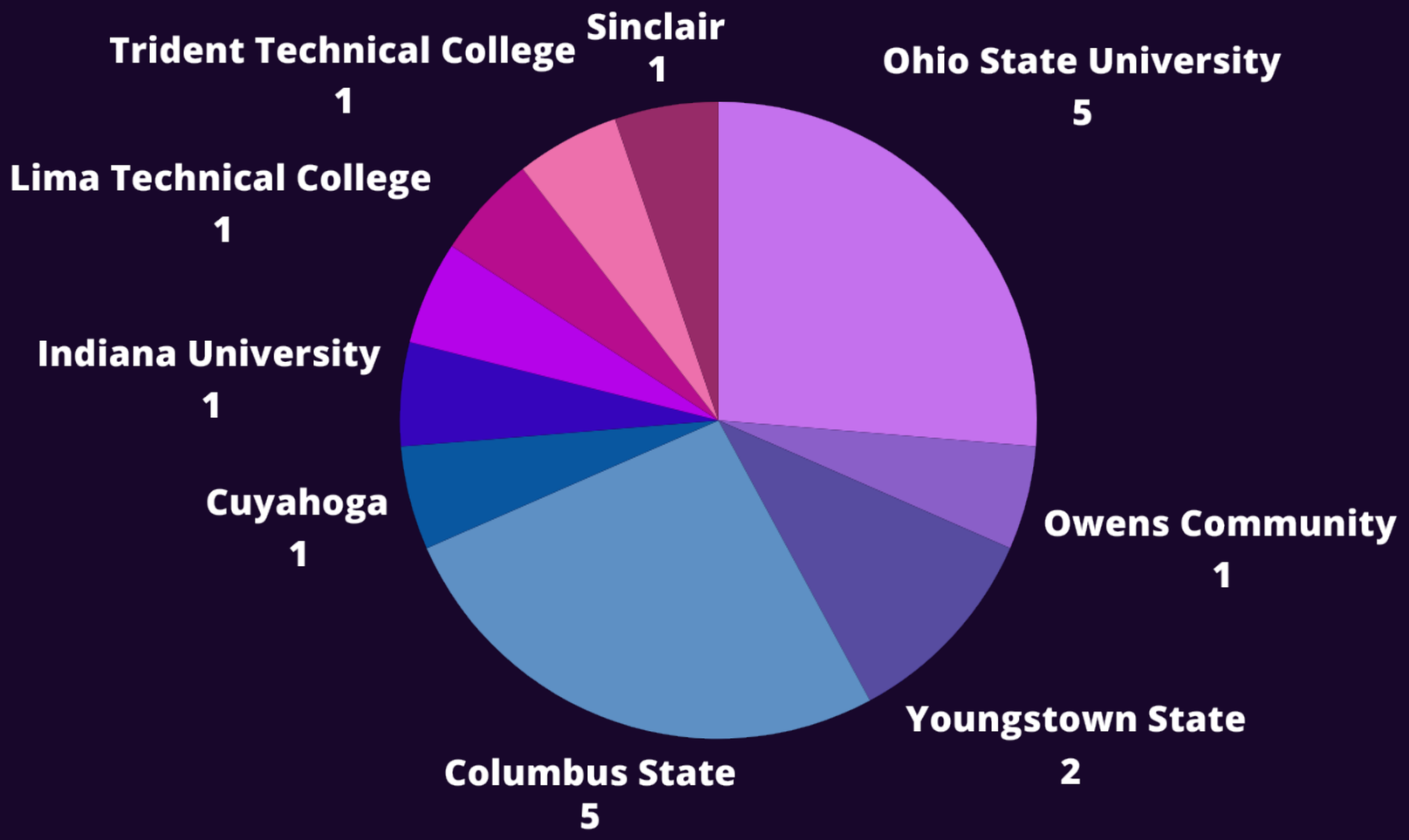
- Calibration
  - All faculty calibrated for the Calculus Detection Competency
  - Identify faculty who are interested in becoming calibrated for the Instrumentation Competency
- Collaboration
  - Faculty retreat late Spring ‘25
- Continue with 100% pass rate of NBDHE and ADEX

Why is calibration among faculty important?

CSCC Faculty

Studied at 9 different DHY schools

Worked as educators in 5 different DHY schools



Treatment Class Determination

- During Assessment II
- The number of points awarded for each quadrant of scaling is dependent upon the treatment class.
- Student should be informing you of their findings prior to you agreeing/disagreeing with Tx Class

ADPIE

Assessment

DHY Diagnosis

Planning

Implementation

Evaluation

Clinic Manual

The student shall determine the degree of difficulty of the patient and record on the front of the CSCC record.

If the evaluation by faculty is determined to be different than that recorded, the student shall draw a diagonal line through the original treatment class and recorded the corrected treatment class on the side.

If the student and faculty disagree on the treatment classification, a third faculty shall be invited to evaluate and provide the determine treatment classification.

AAP Case Type	
Stage and Grade	
OH	
Treatment Class	~~C~~ B

What do we often see with students?

- Student in between two treatment class's
- May be overcalculating tx class for more points/ qualification for Calculus Detection Competency.
- Feeling restorative, CEJ, or abfractions/recession
- Determining tx class based on what they can see supragingivally
- Basing it off of what they were 6 mo ago, 4 mo ago, etc

TREATMENT CLASS

Classification	Description	Example
A-O	No calculus present, only plaque or stain. Amount of plaque or stain cannot change tx class.	Predominantly children and adults with excellent oral hygiene.
A (light)	Localized light to moderate supragingival and/or localized subgingival calculus.	Healthy patient with light build up localized, typically grainy or clickable lower anteriors/max molar buccals.
B (moderate)	Generalized moderate subgingival calculus.	Patient exhibits generalized moderate interproximal calculus (spicules/clickable)
C (heavy)	Generalized heavy subgingival calculus.	Patients exhibit generalized heavy subgingival interproximal calculus on most interproximal surfaces.
D (severe)	Heavy supra and subgingival calculus throughout the mouth.	Patients have heavy, more tenacious deposits on nearly all M-D-F-L surfaces.

Let's do some math...

Generalized > 30 %

Localized <30 %

Four possible surfaces of calculus per tooth M/D/L/BF

x 28 teeth =112 possible surfaces of calculus

112 x .30 (generalized)= 34 surfaces

÷ 4 quadrants = 8 or 9 surfaces per quad

Who learned the TU-17 explorer in school?

Who uses it in practice?

TU 17 EXPLORER INSTRUMENT OBJECTIVES

Grasp: light modified pen grasp

Fulcrum: 1-2 teeth away

Insertion: inserts correct working end at the midline by positioning the tip parallel to gingival margin or slightly tip down

Tip: flush to tooth, using 1-2 mm tip of explorer

Angulation: keeps the terminal portion of the shank as parallel as possible to the long axis of the tooth on the proximal surface

Adaptation: adapts working end to the tooth contour and line angles during activation by rolling the instrument handle between index finger and thumb

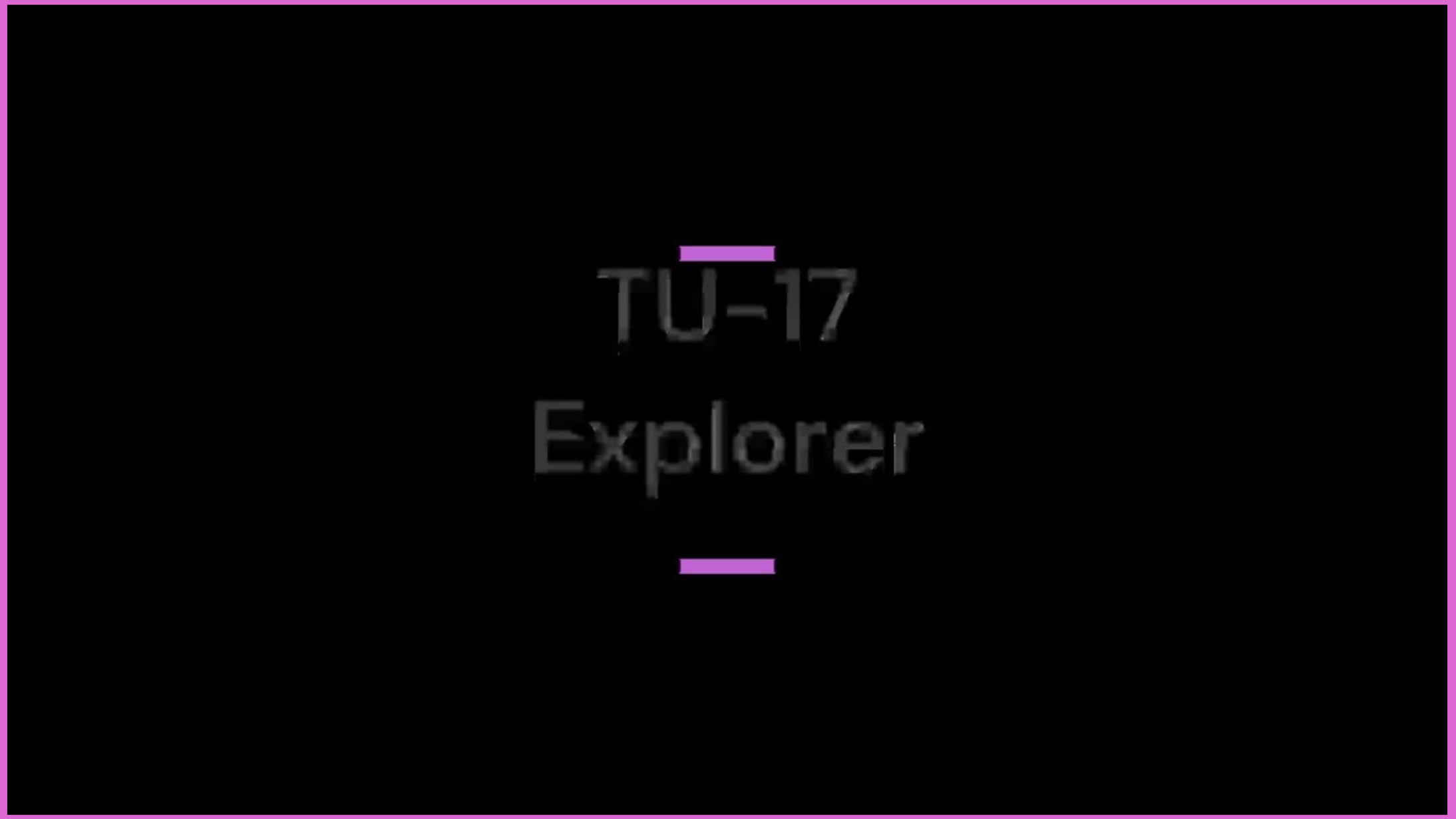
TU 17 INSTRUMENT OBJECTIVES CONT.

Stroke/Lateral Pressure: explores the tooth surface with continuous overlapping vertical or oblique feather light sweeping strokes

Activation: uses wrist rock motion while activating and not finger movement

Effective stroke: explores to the base of the sulcus/pocket and explores 50% of the proximal surface

Control of instrument: exhibits control of instrument, avoiding damage to the gingival margin or sulcus


TU-17
Explorer

ODU 11/12 EXPLORER INSTRUMENT OBJECTIVES

Grasp: light modified pen grasp

Fulcrum: 1-2 teeth away

Insertion: inserts correct working end at correct line angle (DB -> D and DB -> M)

Tip: flush to tooth, using 1-2 mm tip of explorer

Angulation: keeps the terminal portion of the shank as parallel as possible to the long axis of the tooth on the proximal surface

Adaptation: adapts working end to the tooth contour and line angles during activation by rolling the instrument handle between index finger and thumb

ODU 11/12 INSTRUMENT OBJECTIVES CONT.

Stroke/Lateral Pressure: explores the tooth surface with continuous overlapping vertical or oblique feather light sweeping strokes

Activation: uses wrist rock motion while activating and not finger movement

Effective stroke: explores to the base of the sulcus/pocket and explores 50% of the proximal surface

Control of instrument: exhibits control of instrument, avoiding damage to the gingival margin or sulcus

Students use finger on finger for the UR buccals when instrumenting or exploring


TU-17
Explorer

Calculus Detection Competency

Qualifications:

- Tx Class B or C
- Students can pick quadrant
- Must have minimum of 6 teeth in quadrant

Guidelines:

- Student must identify a minimum of **SIX (6), SUBGINGIVAL AND CLICKABLE** surfaces of calculus.
- Student records in **GREEN** pencil and is responsible for recording on comp without assistance.
- If student is unsuccessful, they may re-comp in the same night on a different quadrant.
- A maximum of **TWO STUDENTS** may use the same patient for calculus detection. Each student must choose a different quadrant for calculus detection.

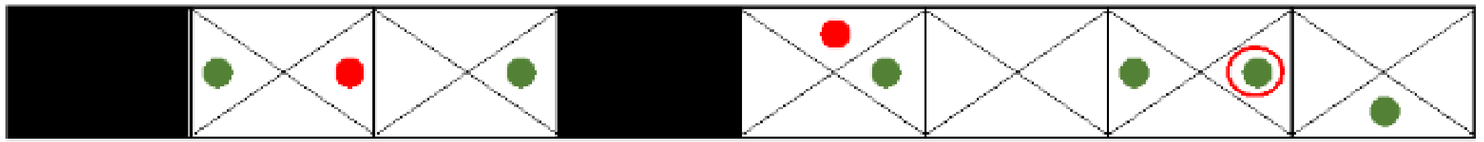
Calculus Detection Competency

Instructor notes:

- If there is calculus at the line angle, it is recorded as M or D. Must be practically on straight lingual or buccal to be recorded as such.
- Instructor grading for calculus detection competency: (Red pencil)
  - red dot with no green dot = calculus present; not detected by student
  - red circle surrounding green dot= calculus not present; student indicated present

Example:

Calculus Detection & Quadrant Grading (block-out missing teeth)



Calculus Detection Competency

Calculus Detection #1 **Tx Class B or C** (circle tx class)

Date	Med. Hx√	Appointment	Clinic Session S	Clinic Session U	Instructor IN	Instructor OUT

Part I: Data Collection/Assessments **S / U**

Part II: Planning

2. Treatment Documentation **S / U**

Part III: Professionalism (Process) **S / U**

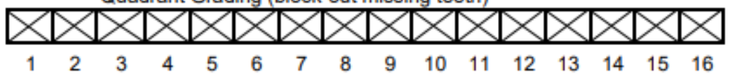
Part IV: Clinical Skills (Process) **S / U**

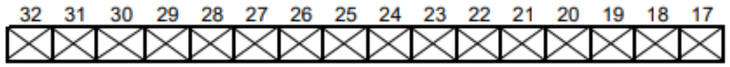
Part V: Calculus Detection # of errors _____

Part VI: Infection Control (Process) **S / U**

STUDENTS MARK IN GREEN PENCIL

Quadrant Grading (block-out missing teeth)





Final Grade ☐

0 - 1 error = 3
2 errors = 2
3 errors = 1
4+/critical errors = 0

Final Grade ☐

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2 errors = 2

3 errors = 1

4+/critical errors = 0

2 or 3 is successful

Tx Class/Calc Detection Reminders

- Instructors should not tell students if a patient is a “good” calc detection patient or not. Student must select patient on their own.
- If they are a Treatment Class B or C, they *should* be eligible for calc comp depending on location of calculus. Remind student about the minimum # of surfaces required.
- While grading, if you are in between a Tx Class A or B… are there enough surfaces for the student to complete the calc detec competency?
- Students cannot ask instructors for advice on which quadrant would be better for competency.
- Treatment Class determination should **NOT** be influenced by tenacity of calculus. It is solely based off quantity and location.
- Heavy plaque/stain without calculus A
- Heavy plaque/stain without clickable ≠ subgingival calculus ≠ B
- There are some weird extenuating circumstances…

Calculus Detection for Scale Check

Reminders:

- # of errors allowed per quadrant change every semester, calibration form also on clipboards.
- Students receive an NI on Daily Performance Grade for Client Care if NI on scaling quads. They will still receive points for completing the patient.
- Make sure red dot is marked on student record and you have initialed before leaving room.
- Student should be ready with red pencil while you are doing a scale check.
- Attempt to use TU-17 when exploring anteriors.

PTEN NOTES

- Students need to be in the habit of documenting quantity and location of calculus, plaque, and stain.
- Real world does not use Tx Class A, B, C, D.
- Every appointment where scaling is completed, patient should include a narrative in PTEN notes.

EXAMPLE

Generalized moderate interproximal and subgingival tenacious calculus. Generalized heavy plaque. Localized light stain supra on maxillary anterior linguals.

Hands-on Activity

01

Calculus Detection

Explore the maxillary arch on the ModuPro Typodont. Record your areas with green pencil. Once the group is finished, compare your recorded areas with other faculty and discuss.

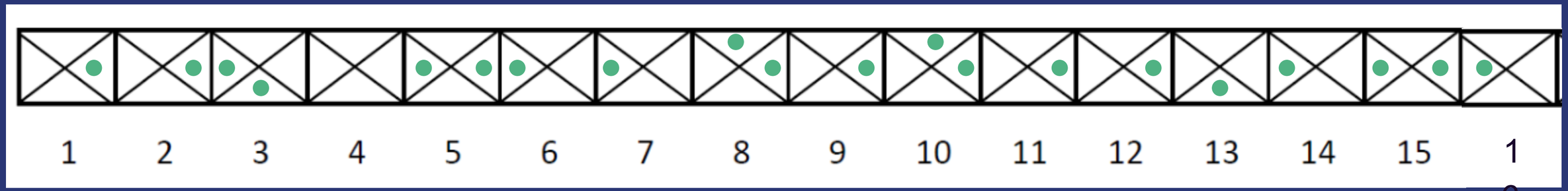
02

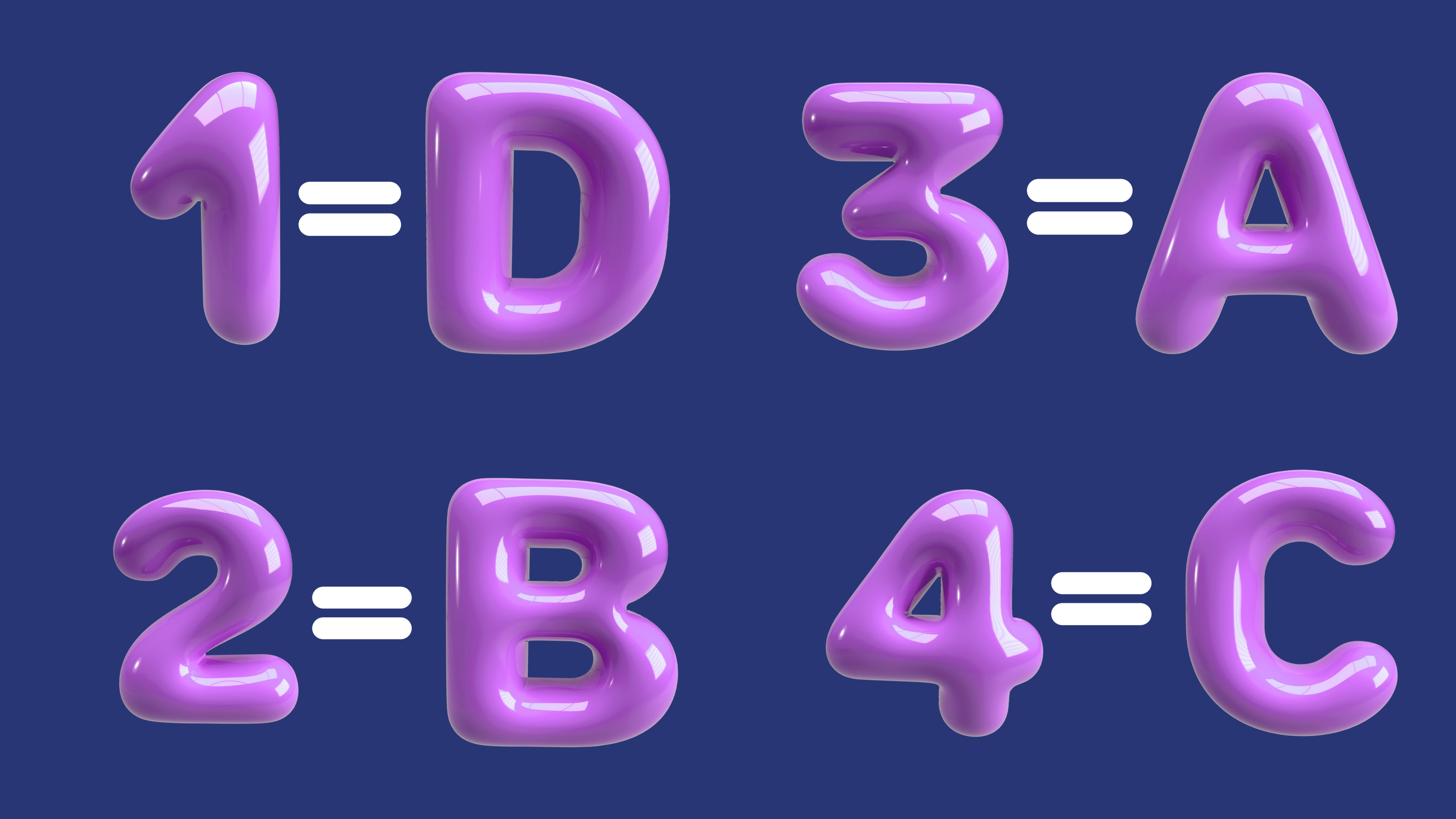
Tx Class Determination

Explore mandibular arch on Typodonts labeled 1, 2, 3, and 4. Record on your sheet which Tx class you would determine patient based on extent of calculus present. We will review as a group at the end.

LET’S COMPARE OUR FINDINGS!!

Answer Key




1=D
3=A
2=B
4=C

Which Tx Class? Ginger Vitis

Ginger Vitis presents for a hygiene visit after “a couple of years” since her last dental visit in 2020. Surprisingly, she only has moderate supra & sub calculus in the lower anterior region and light grainy supra calculus #2 -3 buccal and #14 -15 buccal.

Ginger is Tx Class A

Which Tx Class? Perry O’Donnell

Perry O’Donnell has a lower RPD replacing all lower teeth except #21 -28 Heavy materia alba has been removed so a thorough perio exam could be done. There is light -mod generalized burnished calculus under the gums on lingual surfaces of all the maxillary teeth which are #3 - #14 and light interproximal clickable calculus between all the lower teeth

Perry is Tx Class B

Why?

- There are 20 teeth
- 20 X 4=80 possible surfaces
- 80 X .30=24 surfaces
- 24/4=6 surfaces quad
- the light -mod burnished calculus on the maxillary teeth and the and light interproximal clickable calculus between all the lower teeth qualify this patient to be a Class B
- The materia alba is not a factor
- This patient meets the criteria for a calc detection competency

Which Tx Class? Robin Banks

- Robin Banks has full ortho and is not compliant with the homecare routine recommended by their RDH.
- There are spicules beneath the gums on almost all interproximal surfaces throughout the mouth

Robin is Tx Class B

Why?

- When only looking, one might assume the TX Class is A
- Upon exploring, it is evident that there is subgingival clickable calculus
- We must remind our students that visible calculus is supragingival and NOT a good indicator

Future Calibration Topics...

- INSTRUMENTATION METHODOLGY
- PERIO CHARTING
- HEAD AND NECK ASSESSMENT

Next Meeting Dates

Virtual SP 25 Faculty Meeting
Friday, January 10th, 2025
4:30-6:00pm

In-Person Faculty Calibration
TENATIVE: Friday, February 7th, 2025
4:30-6:30pm

THANK YOU, FACULTY

♥

TEACHING IS A WORK OF HEART