

Active Case Based Learning in Oral Pathology:

The confluence of multiple teaching and learning techniques

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PURPOSE

Traditionally, oral pathology courses have been taught didactically. Recognizing that this approach was not ideal for student learning, a seminar session that embraces multiple teaching and learning techniques was created. This innovation in the seminar's design and delivery focused on providing opportunities for learners to:

Demonstrate clinical judgement

Demonstrate
management of
medically compromised
patients

Demonstrate their understanding of oral lesions

Assess their own knowledge gaps

Reflect on the development of a diagnosis and treatment plan and how it relates to that of expert clinicians

Recognize their role as advocates for their patients

STUDENT COMMENTS

What did you learn today that you think you would apply in clinic?

real life cases help solidify concepts [more] than the normal lecture notes

the skeleton was a good way to break [the cases] down and get you thinking like you should in clinic

discuss cases with colleagues and never be afraid to get a second opinion

to really look at the whole clinical picture, and take into consideration life factors in therapy

management of systemic disease prior to dental treatment

if [the] diagnosis doesn't make sense, don't stop there...be persistent for [the] benefit of the patient

SEMINAR DESIGN

Current seminar sessions are now designed to have 3rd and 4th year students paired together; each pair is provided with a different patient case and a set of guiding questions.

Outline of Seminar

1. Individual work

In the first stage, students work independently to provide:

- -a clinical description of the oral lesion;
- -a differential diagnosis and/or most plausible working diagnosis;
- -an approach to patient management.

2. Pair work

In the next stage, each pair discusses their individual answers and works together to develop a revised plan as a team.

3. Presentation of the wildcard

In the third stage, each pair is given a "wildcard" with new information about the patient's medical history. Pairs discuss how the new information might change the management of the case and revise their plan as necessary.

Student feedback on the use of the wildcard:

it forces you to think beyond the usual approach to diagnosis and treatment

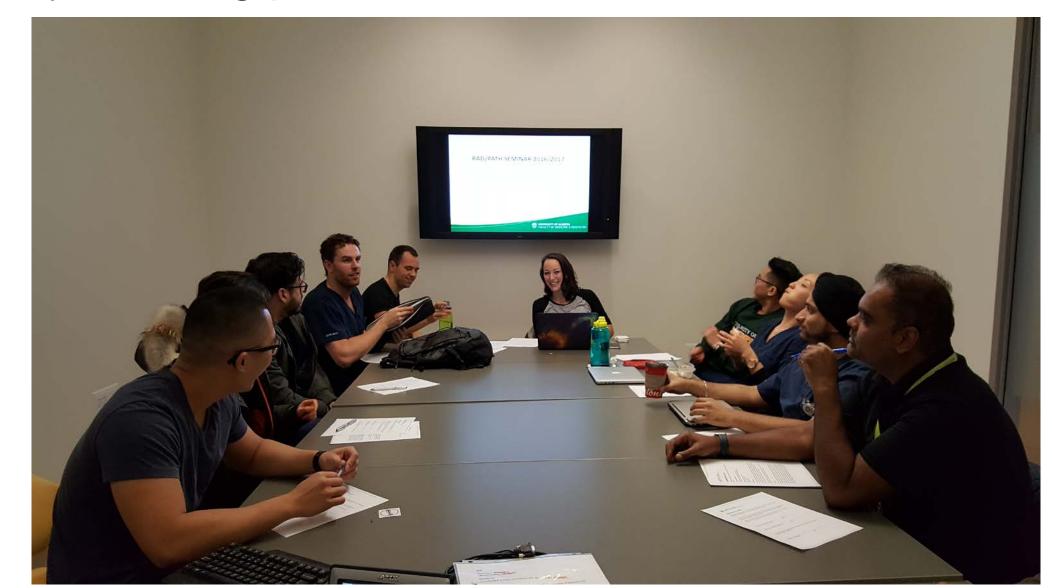
feels more clinical

it was fun and added an element of surprise

[it is] more real world....brings things back into perspective

4. Whole group discussion

In the final stage, the whole group gathers for a discussion of the cases. Each case is discussed for 10 minutes. Pairs present the case and their findings. Facilitators provide feedback to the pair before opening the discussion up to the group. The facilitators close the discussion with a summary of key learning points.



Case Study Think-Pair-Share Oral Pathology Seminar Narrative Storytelling

DISCUSSION

Although our team is in the initial phases of a formal research project, our preliminary findings are showing great promise.

Facilitator Observations

The seminar facilitators observed enhanced discussions between the learners and themselves, and that the students often directed the activities through their questioning of each case.

Student Comments

Third year students have noted the benefits of working with fourth year students, and often stated they would also like to have the same experience in their fourth year of study. In turn, fourth year students commented they believed the third year students were getting exposure to cases sooner in their program with this activity, they felt they took on a teaching role in their group, and the sessions were a good review for their upcoming board exams

REFERENCES

Lyman, F. T. (1981). The Responsive Classroom Discussion: The Inclusion of All Students. In A. Anderson (Ed.), Mainstreaming Digest University of Maryland, College Park, MD. Luc, J., & Antonoff, M. (2016). Active Learning in Medical Education: Application to the Training of Surgeons. *Journal of Medical Education and Curricular Development*. 3: 51–56 doi:10.4137/JMECD.S18929.

Ten Cate, O., & Durning, S. (2007). Dimensions and psychology of peer teaching in medical education. *Medical Teacher*. 29(6): 546-552. doi: 10.1080/01421590701583816 Hansel, W., & Rasco, T. (1992). Storytelling as a method for teaching values and attitudes. *Academic Medicine*. 67(8):500-4.

