

## **APPENDIX 3.3A**

### **DESCRIPTION OF PBL SESSION AUGUST 31 2007**

#### **BDS 5 START CASE BASED DLP – PROSTHODONTICS & ORTHODONTICS (MILSTEIN / MITHA ORTHO / PROS CASE)**

How Can We Help Mark?

(Treatment Alternatives)

#### **DLP SESSION – PLENARY**

**Fictitious names have been used throughout the lesson description**

START: 1407 – WHOLE CLASS WITH ALL FACs (THOUGH Prof Tamblin WALKS IN SHORTLY AFTER THE START) IN DGA (LECTURE THEATER)

As the session / lesson is held in the auditorium I made no note of where each individual student and staff sat due to the vastness of the room. Most of the students, however, sat in the middle section and the facilitators sat in the section near the exit.

#### **1407-1427**

After some lighthearted banter from the group in the DGA, Prof Andressen (as the chair of the DLP) started the lesson by greeting all and welcoming them to the session. He gave a brief overview of the case and told the students that:

Group 3 will present the ideal treatment alternative

Group 2 to present the poor / rural treatment alternative and for

Group 1, he said that other members (students and staff) will consider what they will do. As he starts expanding of the presentation, by relating it to the students' future where they will be needed to make presentations, Prof Tamblin walks in.

Prof Andressen then instructs Group 3 to start, followed by Group 2 and then Group 1. The group of 3 facilitators – including another member of the professorial staff who attended to observe the proceedings: Prof Green - (Profs Tamblin, Lizzard and Andressen) start a conversation which is followed by laughter. I cannot hear what they are talking about.

Noah from group 3 then starts the presentation. He passes around the study models and radiographs and introduces the basic preventive option. The restorative treatment proposed includes the provision of simple plastic restorations taking into account the possibility of occurrence of root / radicular decay. He discusses the impact of orthodontic treatment especially considering presence of the ankylosed tooth. The discussion of the proposed treatment plan takes into account the possibility of rendering complex treatment options at a later stage in Mark's dental management life. He gives reasons for all the options he discusses.

At one point Prof Andressen's cell phone rings audibly and he jokes about switching the phone off. At that moment, Prof Tamblin's phone also rings!

Noah displays notes and plans regarding bone graph (?). The discussion also includes how the treatment should be carried out i.e., the treatment sequence. He also emphasises the need for social counselling with respect to the dental aesthetic requirements.

At the end of his presentation, Prof Andressen asks for questions from the floor, especially asking for comments on aspects of the option that anyone feels was overlooked. Prof Lizzard offers that maybe the questions should focus on what was presented after giving his overview on what had just been presented (**reinforcing the points presented**).

Janice offers that there is need to establish the vertical dimension and also the need to investigate possible underlying syndromes which will point towards a genetic cause. Prof Andressen reinforces the validity of Janice's point and asks the rest of the class if they understand.

Prof Andressen asks Prof Tamblin about the motivation for the 'ideal' treatment. Noah then gives an indication of what is to be replaced and restored, to which Prof Tamblin questions the need for orthodontic surgical determination and Mabel\*accedes that they cannot answer to that. Stavros, however, brings in the orthodontic pre-operative diagnostic tools (Lateral Cephalograph) and the information that results from the record analysis that will aid the determination for the need for orthodontic surgery intervention. Prof Andressen focuses the

question toward what motivated Group 2's presentation with respect to their proposed Ideal Treatment. There ensues a mini discussion between Pros T and Lizzard which is inaudible).

Mabel offers an explanation regarding the motivation and gives this answer standing at the podium. After this, Yasmin\* introduces the concept of 'distraction osseogenesis' and Michelle\* explains this concept by further unpacking the detail involved.

Yasmin then discusses the concept of genioplasty, following which Tasneem\* discusses frenectomy. Prof Lizzard then explains the orthodontic consideration as pertaining to Mark's situation and tells the students that the case was actually treated when the DLP was initially developed and done by the students. **E.g. encoding specificity**

Prof Andressen brings in the issue of self esteem and how it may relate to Mark's case especially focusing on the gender perspective. This reinforces some of the issues presented by Group 3 who discussed the 'Ideal' treatment option.

## 1427

Prof Tamblin alerts the class to some of the points that were missed such as: treatment determination for the ankylosed tooth and the need for further diagnostic tests / tools before prescription of definitive treatment.

Prof Andressen starts offering alternatives based on the points raised by Prof Tamblin, to which the latter asks the class if 'Prof Andressen did the DLP?' **maybe Tamblin realises that A taking over and not letting students drive the process** Prof Tamblin then questions the students further on the need for a diagnostic wax up and its relevance to the case under discussion.

Mabel then offers the information that a Kiesling diagnostic set up may be indicated, however, she does not give the reasons / rationale why this might be so. She then indicates that serial radiography and super impositioning of radiographs may also be of assistance with the diagnostic process in this case. **Critical reasoning not demonstrable, reasons for the extra diagnostic aides not given especially regarding their relevance to the case under discussion**

Noah offers the reasons re model surgery – ie why a Kiesling set up may be necessary.

Prof Tamblin probes the students further on other diagnostic tests that may be necessary and offers leads re how to determine the amount of bone present, or rather, how to determine the amount of bone present using the available tools. This prompts a whole class response of the need for CT (computerised tomography) scans.

Stavros then fills in some of the missing information re: mounting of models on semi-adjustable articulators; determining a diagnostic set up pre-operatively before any invasive tests / procedures are done. **E.g of activation of prior knowledge from Tamblin's prompting of the students by asking leading questions**

Prof Tamblin then draws the class to the issue of removable prostheses, by asking a leading question to direct the students to start thinking along those lines: 'what about metal vs acrylic removable partial denture as a diagnostic tool?'

At this point Prof Andressen asks Prof Lizzard why Mark did not wear a lower partial denture. Seeing that a side-discussion would ensue between the 2 professors, Prof Green alerts them to the need to follow the class discussion and not start their own mini discussion of the case. Prof Tamblin answers the question about Mark not having worn a partial denture and Michelle adds further to the explanation given. Prof Tamblin also adds a note that there might have been other reasons that caused Mark not to wear a partial denture and offers issues regarding Mark not been able to adapt to a denture due to the design of the prosthesis.

Noah then commented that it would have been beneficial if the partial denture was there for the class to see and assess it. Stavros however, gave more reasons for the unsuitability of a partial denture as a management strategy.

Yasmin then raised the issue of the patient's attitude toward dental treatment especially as he was accompanied by his mother, even in the consulting room. She commented on the relevance of Mark's age and whether it was the mother's expectations or Mark's expectations that should be given more priority / emphasis.

Prof Andressen then takes over the discussion on the psychological assessment of patients and adds a lot of points to this effect.

Mabel draws the class's attention to the need not to focus on a 'quick – fix' option / attitude, but rather to look at the case comprehensively with longevity of the treatment offered as the primary concern. To which Prof Tamblin asks her how long she thinks the treatment being

offered by the group is going to last. At which point Noah, offers that it could last about 18 months.

Mabel also emphasises the need for a team approach towards the management of the case for improved longevity of any treatment offered.

#### **1439-**

Tasneem starts a discussion on the reasons for the missing teeth and the management of such, bringing the issue of genetic counselling in the management strategy, especially pertaining to the other siblings if they need dental intervention in the future.

Nandi (MSkh) then expands on this line of discussion, bringing in the aspect of other dental implications / conditions specifically ectodermal dysplasia and the condition's impact on the provisioning of dental treatment. To which Prof Andressen asserts that Mark's mother would have certainly informed the dentist if her child had the condition.

#### **1441-**

With no further uptake of the ectodermal dysplasia issue, Prof Lizzard comments on the relevance of the timing of performing a frenectomy especially with respect to the management of a diastema.

Yasmin and Tasneem give more information regarding frenectomies.

Graham draws the class's attention to the issue of finances and how that impacts on the provisioning of treatment especially related to managed health care and the issue of third party funders (Medical Aids) and Janice adds more information to this discussion about the requirement by Medical Aids for patients to obtain authorisation from them (Medical Aids) before most procedures can be done, especially those deemed complex and not 'run-of-the-mill' cases. She points out how this act imposes a lot of stress for the practitioners and how this may impact on the treatments offered.

#### **1445**

Michelle starts a discussion on the question of function vs. Aesthetics and how this would impact in Mark's case. However before any input can be had from anyone in the class Prof Andressen explains capitation and how Medical Aids administer this (this does not address the case specifically as the case has clear instructions under which the treatment options are to be considered – one can therefore see this as adding information not really pertaining to the actual case).

This point marks the end of group 2's presentation and Prof Andressen gives them feedback and tells them that their presentation was poor especially relating to the verbal explanations and not the electronic content / style.

## 1448

Beverley's group then present and Prof Andressen informs the class that the presentation will be a power point one. Beverley discusses the need for a frenectomy, the issue of the missing lateral incisors and how these two factors are critical to the aesthetic challenge. As she seems to be talking only to Prof Andressen, Prof Green reminds her that students need to speak to the class and not the staff. Beverley brings in the issue of the relevance of the patients age with respect to staging dental treatment appropriately, as well as the issue of gender and their impact with aesthetics.

The presentation is quite short and minimal discussion ensues following it. Prof Andressen's phone goes off again and he answers it. At this point, a discussion around Government payment of dental personnel ensues and Prof Tamblin asks what that is of relevance to the case under discussion. He urges the class to concentrate on the issues inherent with the different scenarios as stipulated in the DLP. ? loss of focus from the students with little control by the facilitators?

Stavros brings up the point about the fact that the diastema is already closed therefore is not post orthodontic treatment (the models provided are pre-operative models and reflect the diastema closed). Prof Lizzard discusses the need for a frenectomy, following Prof Andressen asking the question. The latter also points out the difficulty of ascertaining whether it is the primary or secondary canine teeth that are present (Prof Tamlin's group question at the small group stage).

**1454**

Prompted by Beverley's suggestion of using prosthetic teeth to close the gaps where the missing teeth are, Prof Tamblin asks about the option of using a Maryland Type bridge especially in cases situated in rural communities. He reinforces the notion of using appropriate technologies to answer and manage some dental conditions where resources are limited e.g., access to specialist dental centers.

**1457**

Janice, as the spokesperson for their group, presents their choice of treatment. She discusses the middle level scenario – urban setting with limited resources, where money is an issue. She starts the case from the beginning and not taking into consideration issues already discussed and she reads off what is on the slides without really offering much information. However, she does expand on factors influencing the treatment plan slightly.

The presentation ends at 1507.

Prof Andressen picks up the point on 'partial anodontia' that Janice talked on and explains to the class that there is nothing like 'partial anodontia' as anodontia means 'no teeth' and that therefore there cannot be partial anodontia. He asks them about the need to provide a metal based upper partial denture.

From the points raised by Janice, Michelle asks the question why there is a need to increase the vertical dimension and queries whether there is lack of restorative space and points out that if the latter is the case – i.e., no restorative space, they should consider increasing the vertical dimension (VD). Janice explains why they thought why it was important to increase the VD.

Prof Lizzard then alerts the class to the fact that the Lateral Cephalograph and study models can also be used as a tool to assess the VD. He explains that an increased anterior overbite observed on the study models could be an indication of decreased VD, and therefore presenting with the need to increase VD with the corrective management strategy. He gives more clarity on the issue of VD.

Prof Tamblin asks the class how they would reduce the overbite conservatively and the response from them is that they should allow the first molars to erupt more, to which he gives affirmation.

There then follows a 'question and answer' sequence between the staff members present with the students not participating in this.

**1512**

Stavros then discusses Mark's mother, her expectations and issues around informed consent. Patrice comments on the Child Act (bill) of 2007 and emphasises that it is still at the bill stage and has not been enacted into law yet. The class then takes up a discussion around the bill.

During a lull in this discussion, Prof Green passes the attendance register to the class and reinforces the intention of the DLP informing the students that they need not have come up with a final treatment plan, however they needed to have considered all the advantages and disadvantages of the different scenarios during the small group discussions.

Discussion of issues not integrated and following a question and answer mode with the staff present dominating most of the talking and taking over certain points and making them into mini lectures. Not allowing students to develop their reasoning / justification of issues they raise.

Prof Tamblin only one seeming to facilitate discussion from the class and pointing them to issues that they seem to miss out and trying to provide an integrating thread to the student discussion – otherwise Profs Lizzard and Andressen 'giving' students the information and not letting students bring out the issues themselves.

Prof Andressen then informs class that orthodontic surgery is not warranted in this case, at which point he adjourns the session at 1523