Revised Research Proposal for implementing Air-Flow tooth polishing at Laurelwood Dental Hygiene Inc.

Introduction

Extrinsic tooth stains are the unwanted result of consuming coffee, tea, red wine and blueberries as well as smoking cigars, cigarettes and hookah. Dental patients are concerned with the esthetic outcome of the professional tooth cleaning and this includes the efficient removal of stain. Stain removal by the dental hygienist, should not cause damage to the tooth surface or increase dentinal hypersensitivity and the dental stain should be adequately removed.

Statement of Problem

The dental hygiene practice currently uses prophy paste and the rubber cup polishing technique to remove stains from their patients' teeth. When the stains are heavy or covering more than 30% of the tooth surface, removing the stain is very labor intensive with hand scalers and ultrasonic scalers. Patients with moderate to heavy staining are dissatisfied with the current method of tooth polishing to remove stain. The problem is twofold. First prophy paste does not adequately remove stain and secondly many patients state that their teeth become sensitive after polishing with the prophy paste and rubber cup polisher.

Proposed Solution

A possible solution would be the incorporation of The Air-Flow by Hu-Friedy which uses glycine powder and air to effectively remove stains from tooth surfaces. This polishing system efficiently removes extrinsic tooth stain without increasing dentinal hypersensitivity.

Scope

To assess the feasibility of incorporating the Air-Flow air polisher into the recare appointment, I plan to pursue the following areas of inquiry:

1. What are the clinicians' experiences with the current system of stain removal regarding efficiency and tooth sensitivity.
2. Is the Air-Flow an effective alternative to the traditional stain removal techniques.
3. Does prophy paste adequately remove dental stain?
4. Are patient's satisfied with the current method of stain removal?
5. What is the initial investment of the Hu-Friedy Air-Flow polishing system

Methods

My sources of data will include contacting a Hu-Friedy sales representative. I will conduct a survey of other independent practicing dental hygienist in my area, in

order to determine their usage of air-polishing for dental stain removal. I will also examine online sources of the current peer-reviewed literature to supplement my sources of data.

My Qualifications

I am a registered dental hygienist practicing in a private dental clinic for 5 years. I have attended several seminars examining the benefits of the Hu Friedy Air-Flow system. In addition to having an Honours Degree in Psychology I am a student in the Dental Hygiene Degree Completion Program at the University of British Columbia. My educational experiences have provided several research opportunities through the completion of several projects and assignments.

Conclusion

The Air-Flow method is believed to result in higher efficiency (better stain removal without causing dentinal hypersensitivity) than the current methods of dental stain removal. Clinicians are frequently faced with the challenge of satisfying the patient while not causing harm. I can determine if the incorporation of the Air-Flow by Hu-Friedy is a feasible solution by following up on the 5 areas of inquiry listed above. I am prepared to research this immediately upon your approval.