



Stability of orthodontic treatment: Short term retention outcomes of patients seen at a university clinic

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INTRODUCTION

The stability of orthodontic treatment is very important for treatment outcomes to be considered effective. Improved stability ultimately benefits the patients. Many factors can affect the stability and the amount of relapse seen post-treatment. Retention is a key factor in preventing relapse seen after treatment. Limited evidence exists on the short-term retention and stability of orthodontic treatment outcomes. Further research is needed to evaluate these outcomes.

OBJECTIVES

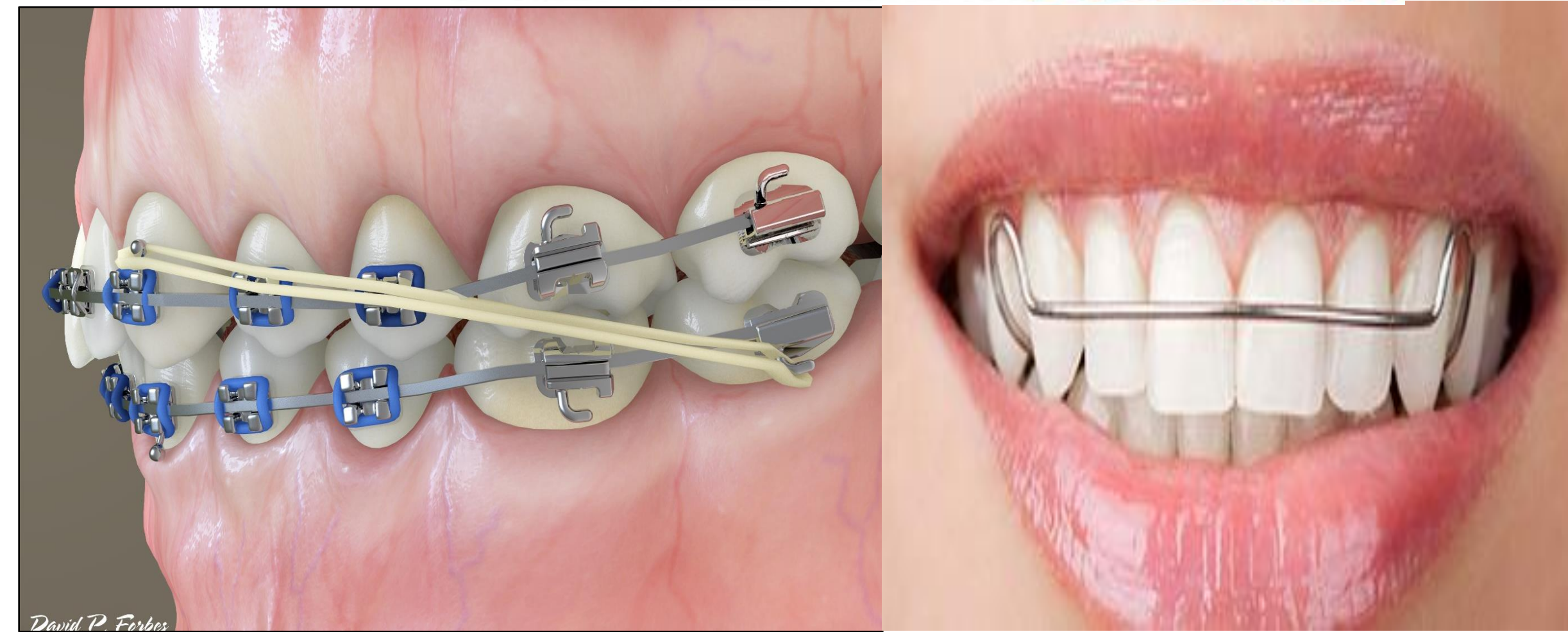
1. What are the short-term stability outcomes of orthodontic patients treated at one university clinic?
2. To assess the short-term stability and retention outcomes of one university orthodontic clinic.
3. This will provide a better understanding of the effectiveness of current retention protocols. The study results can ultimately benefit patients by increasing awareness. Data will also aid clinicians in re-evaluating existing retention protocols for better long-term treatment outcomes.

METHODS

- ❖ Patients will come from a report run from Dolphin listing patients that completed treatment since 2008. Patients will be selected with the selection criteria stated above
- ❖ All patients who meet selection criteria and have finished comprehensive treatment at Roseman Orthodontic Clinic will be contacted by phone or email.
- ❖ Take photographs, I-tero Scan, and perform clinical exam and compare to records that were taken at the end of treatment. The questions asked will be pre-scripted to ensure that each patient is asked the same questions
- ❖ Time points will be compared using the PAR index and Little's Irregularity Index to determine the amount of relapse or movement of teeth.

HYPOTHESES

1. No hypotheses needed



VARIABLES

Dependent:

- ❖ Amount of wear

Independent:

- ❖ Amount of time since de-bond
- ❖ Type of retention

PRESENTED BY DR. CASEY REHRER AT THE ROSEMAN UNIVERSITY RESEARCH SYMPOSIUM, HENDERSON, NV ON APRIL 11, 2021

RESEARCH DESIGN & SAMPLE

- ❖ Retrospective study of short-term retention outcomes within individuals treated at the Roseman University Orthodontic Clinic.
- ❖ The sample is derived from patients that have completed comprehensive orthodontic treatment at Roseman Orthodontic Clinic from 2011-2018. Patients also must be in retention for more than 1 year.
- ❖ Search on Dolphin Software for patient sample

INCLUSION & EXCLUSION CRITERIA

Inclusion Criteria:

- Comprehensive orthodontic treatment
- Initial and Post-treatment records
- Be in retention for at least 1 year
- Ortho-insight records

Exclusion Criteria:

- Early De-bond cases
- Patient was not able to be contacted

STATISTICS

The Statistical Analysis will be conducted using Social Sciences (SPSS) Version 26.0 for the following analysis:

- ❖ Data obtained will be from pre-treatment (T_0), post-treatment (T_1), and follow-up appointment (T_2).
- ❖ We will have 2 examiners, who are calibrated, perform the measurements of the teeth using the PAR ruler or the software on Ortho-insight. Overjet and overbite will be measured using ruler. Data will be stored on a secure hard drive locked in a safe.
- ❖ We will measure the amount of movement of the anterior teeth in mm compared to when the teeth were de-bonded.

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