A 5 year retrospective assay of implant complications in private practice

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**Introduction**

With the implant experience in Victoria well developed, this eviDent project seeks to gain information about the past experiences of practitioners that will then drive a set of evidence based guidelines for the management of implant patients.

**Aims**

- To describe practitioner characteristics;
- To describe the demographics of patients receiving implant restorations;
- To describe the baseline medical and oral health conditions of patients receiving implant supported restorations;
- To describe the distribution of the different implant systems used;
- To document the time and type of implant restoration;
- To describe the placement/ location of implant restorations by tooth position in the arch;
- To describe the type and timing of restorative and biological complications observed; and
- To identify trend patterns that appear to contribute to these complications.

**Rationale**

The data from this project will allow the development of practitioner guidelines for treatment planning, case management and complication management. These research based guidelines will be central to a future prospective study in which patients would be managed and monitored using the formulated guidelines.

**Methodology**

A retrospective assay of patient records supplied by practitioners who have placed and/ or restored implants. A data extraction tool will be used by two Research Assistants with specific training in implant terminology and previous experience of extracting data from dental records.

**Inclusion criteria for implants**

- Placed or restored by practitioners between January 2005 - December 2009 inclusive
- Single tooth implants (these may be multiple single tooth implants in the same patient)
- Multiple-unit implant cases

**Exclusion criteria for implants**

- Cases with missing or incomplete records.

**What are the expected outcomes?**

It is anticipated this project will:

- evaluate the efficacy of the measures used to manage the complications; and
- provide information that would lead to evidence based management strategies for implant cases in Victorian private practices.
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Findings
- Medically diverse group
-Clinicians must be familiar with their target demographic and understand how the common co-morbidities amongst this patient group can influence clinical decision making and outcomes.
- Operator reported attrition was related to higher rate of veneering material fracture.
- More contact point complications were found in the posterior regions of the oral cavity.
- More female patients received implant restorations in the posterior region of the mouth.
- The clinicians, particularly the specialists generally favoured a retrievable design in choosing the method of retention for the prostheses.

Publications
- Analysis of commonly reported medical conditions amongst patients receiving dental implant therapy in private practice
  S Austin, D Bailey, A Chandu, M Dastaran, R Judge
  Accepted for publication in the Australian Dental Journal 12 October 2014
- A 5 year retrospective assay of implant treatments and complications in private practice: The Restorative Complications of Single and Short Span Implant Supported Fixed Prostheses
  J Wang, R Judge, D Bailey
  Accepted for publication in the International Journal of Prosthodontics
- A 5 year retrospective assay of implant treatments and complications in private practice: The Restorative Treatment Profiles of Single and Short Span Implant Supported Fixed Prostheses
  J Wang, R Judge, D Bailey
  Accepted for publication in the International Journal of Prosthodontics