



NEWFOUNDLAND & LABRADOR DENTAL BOARD

IMPLANT DENTISTRY GUIDELINES

EDUCATIONAL REQUIREMENTS & PROFESSIONAL RESPONSIBILITIES

The Newfoundland and Labrador Dental Board Guidelines contain practice parameters and standards which should be considered by all Newfoundland and Labrador dentists in the care of their patients. It is important to note that these Guidelines may be used by the Board or other bodies in determining whether appropriate standards of practice and professional responsibilities have been maintained.

PREAMBLE

Implant Dentistry is the branch of dental practice pertaining to the restoration and maintenance of oral function, appearance and health of the patient through the replacement of teeth and contiguous structures with endosseous dental implants and associated prosthetic components.

The field of implant dentistry includes diagnosis and treatment planning, surgical placement and uncovering of appropriate fixtures, prosthodontic restoration and maintenance of dental implants and implant prostheses. Implants serve as supporting units for both fixed and removable prostheses.

Those dentists utilizing dental implants in their practices require specialized knowledge and clinical skills related to both the surgical and prosthetic phases of treatment. These Guidelines outline suggested educational and professional responsibility requirements for those practitioners wishing to use dental implants for their patients. These Guidelines do **not** attempt to provide information relating to the clinical steps necessary in doing dental implants.

INITIAL EDUCATION REQUIREMENTS

Prior to performing any implant procedure, dentists providing implant dentistry must have undertaken comprehensive training by means of a course or courses which adhere closely to the following criteria.

The course or courses should:

1. be conducted by persons who have had recognized comprehensive formal, preferably university-based training and significant experience performing dental implant procedures;
2. have didactic and clinical-related components;
3. have a hands-on clinical simulation component;
4. teach methods and systems that have been shown to be successful as a result of published investigative scientific research that has ideally been supported by longitudinal clinical studies that demonstrate the efficacy and effectiveness of the method and biocompatibility of the materials;

5. be adequate duration involving not less than two full days of instruction for each of the surgical and prosthetic phases, or four days of combined instruction so that dentists wishing to become involved in implant therapy

- Understand the biological basis of osseointegration (materials, biomechanics and bone physiology) for dental implants and their interactions with host tissues and the implications regarding implant loading.
- Understand the anatomical considerations and limitations in relation to implant placement.
- Understand the current diagnostic and imaging procedures that are available for the assessment of available bone quantity and quality.
- Are able to recognize and identify local and systemic or behavioural conditions that may influence the surgical, prosthetic or maintenance aspects of implant treatment.
- Understand sequential planning procedures for implant treatment including appropriate referral procedures.
- Understand pre-surgical prosthodontic preparation procedures, such as surgical and radiographic stents, and the basis for specific implant selection.
- Understand the various provisional and definitive prosthodontic procedures for implant supported and/or related prostheses.

Practitioners that limit their implant practice to one component only (surgical or prosthetic) must take the related course or courses for each component.

The minimum educational requirements suggested in these Guidelines are adequate for most practitioners to begin very basic implant procedures. Additional training and education should be completed before more complex implant treatment is undertaken.

Since implant dentistry is often practiced using a team approach, it is important that all members of the team understand the conditions, concerns and constraints faced by each member of the team. It is recommended, therefore, that all members of the implant team have a working knowledge of all phases of implant treatment.

Many registered dental specialists (endodontists, oral and maxillofacial surgeons, periodontists and prosthodontists) have received the above minimum education requirements as part of their postgraduate specialty training program. Those who have not received such training must conform to the minimum requirements outlined in these Guidelines.

ONGOING EDUCATIONAL REQUIREMENTS

Dentists involved in implant dentistry should maintain their implant knowledge and skills on an ongoing basis. This can be accomplished by ensuring that continuing education programs are taken that review basics implant principles and/or present advances in the implant dentistry field. In the rapidly changing and expanding field of implant dentistry, it is especially important that additional training be obtained before utilizing new techniques or materials.

It is the responsibility of each dentist to evaluate any new technology, products, and techniques to ensure that their use is supported by valid scientific data and long-term studies, and that necessary Health Canada approvals are in place. Caution is advised in extrapolating results from one system to another.

PROFESSIONAL RESPONSIBILITIES

Proper patient evaluation and planning is of utmost importance in implant treatment. Providers of implant therapy must attempt to ensure that no harm will be done to the patient which might result in a situation where the remaining tissues are irreversibly and detrimentally altered. Proper patient selection must include physical and medical suitability and the implant site must receive optimum pre-operative assessment. The implant size, number, orientation and distribution should be capable of supporting the planned prosthesis.

Dentists performing implant dentistry must show evidence of significant pre-surgical provision of information and discussion with the patient and adequate consultation with all professionals involved in the treatment process. Alternative conventional dental treatment modalities should have been clearly presented and considered, along with the dental implants, as part of the treatment planning process.

Patients must be made fully aware of the risks, prognosis and financial implications of the entire implant procedure (e.g. surgical, prosthetic and maintenance) prior to the initiation of treatment. Prospective patients need to understand their ongoing responsibility for the long-term success of the treatment relative to oral hygiene and other professional maintenance visits, and recommended home care regimens.

In obtaining informed consent for dental implant therapy, the patient records should show that the following points were discussed:

- the nature of the problem;
- the availability treatment options for correcting the problem;
- the advantage, any risks, and the likely prognosis of each option;
- the total cost of each option;
- the recommended treatment.

As with all dental treatment, detailed dental records must be kept and maintained which should include:

- documentation that informed consent was obtained;
- study casts and other diagnostic aids, such as surgical guides, radiographic guides, diagnosis setups, and photographs, as indicated;
- appropriate radiographs that have been used to show the proposed implant site (s);
- detailed notes relative to the procedures performed and post-operative advice given to the patient including records of any educational material given to the patient;
- documentation of ongoing clinical monitoring including radiographs where appropriate.

Surgical notes should include standard surgical notations as well as:

- implant location, size and type;
- difficulties encountered during placement, if any;
- all materials used during surgery;
- size and type of abutment placed at uncover;
- osseointegration status using standardized measurement or descriptive criteria;
- any recommendations, instructions or advice given to the patient about the surgical treatment.

Prosthodontic notes should include notations on the prosthodontic procedures performed as well as:

- size, location, type and angulation of the implant;
- osseointegration status using standardized measurement or descriptive criteria;
- size and type of abutment used;
- type of prosthesis fabricated and materials used;
- type of connection – screw or cement;
- a record of all components secured for function in the patient's mouth;
- any recommendations, instructions or advice given to the patient about the prosthodontic treatment.

Once the treatment is completed, a member of the implant team should be designated as the ongoing care provider. This practitioner will be responsible for general maintenance of the implant (s) and the supporting prosthesis, and for informing the patient of the ongoing preventive requirements. Should difficulties arise, other members of the team should be consulted.

Comprehensive training programs in the utilization of dental implants will serve to protect the public of Newfoundland and Labrador as well as afford protection for the practitioner.

Lack of adequate and/or inadequate clinical treatment and records may place a practitioner at risk for civil proceedings, if there are adverse results due to the treatment rendered.