IMPLANT DENTISTRY PRIVILEGE

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Introduction

Before undertaking implant treatment, a dentist should be familiar with The National Health Regulatory Authority's ethical values for Dental Professionals, in value 3 which states (Striving to conform to the highest standards of healthcare regulation), which stresses the need to provide a good standard of care based on available up-to-date evidence and reliable guidance. The clinician must take an evidence-informed and patient-centred approach to their choice of techniques and materials, and be satisfied that the manufacturer of materials is sufficiently stable and of adequate stature to be able to provide component parts for the foreseeable future. The clinician should also take responsibility for assessing the effects any implant feature may have on the surrounding tissues.

Scope of Implant dentistry:

Implant dentistry encompasses a variety of surgical and restorative dental techniques and procedures, but it can broadly be divided into two levels:

1. Replacement of missing dentition involving the **straightforward** placement and/or restoration of implants.
2. Replacement of missing dentition involving the **complex** placement and/or restoration of implants. The table provides guidance about 'Straightforward' and 'Complex' cases.

Criteria	Straightforward	Complex
Perception of case	You can easily visualise the end result and the treatment stages are predictable. There are no aesthetic risk factors.	The end result cannot be easily visualised without extensive diagnostic and planning techniques. Treatment will include multiple stages to achieve the desired outcome and may involve multidisciplinary planning. Complications are more likely to occur than with straightforward cases. The aesthetic requirements or limitations of the case are high, as are the expectations of the patient.

Age and medical history	The patient is fit to undergo routine oral surgical and restorative treatment procedures. There are no medical risk factors.	Due to age or physical/medical compromise, the patient will require special care and management. Consideration will need to be given to the duration of the required procedures and the complexity of any remedial action that may be required should complications occur.
Tooth position	The teeth to be replaced conform to the existing arch form, and the adjacent and opposing teeth easily determine the optimal prosthetic tooth position. There are no aesthetic risk factors	There are no adjacent teeth, or those present are in an unsuitable position. There is a need to carry out extensive diagnostic procedures to determine the optimal tooth/implant position for aesthetics and function.
Implant surgery	The implant surgery procedure is without anatomically related risks and can be carried out without the need for significant hard tissue grafting (this includes onlay bone grafting and sinus grafting).	The implant surgery is a more difficult procedure, which has anatomically related risks and might require significant hard tissue grafting (this includes onlay bone grafting and sinus grafting). Surgery will involve significant alteration to anatomical structures with potential risk of damage to vital structures.
Soft tissue	Minor augmentation or alteration of the position of the peri-implant mucosa is all that is required. Such intervention would not require significant grafting of hard/soft tissue. Soft tissues biotype (quality and quantity) is satisfactory.	There is a need to significantly augment or alter the position of the peri-implant mucosa, requiring significant amounts of hard/soft tissue to be grafted.
Occlusion	The teeth can be replaced conforming to the existing occlusal scheme and at the same vertical dimension	There is a need to substantially change the existing occlusal scheme or the occlusal vertical dimension.
Periodontal status	The patient has healthy periodontal status or requires only straightforward mechanical periodontal intervention to eliminate	The patient has active periodontitis with advanced horizontal/vertical bone loss and tooth mobility. There are

	minor pocketing or bleeding and improvement in plaque control.	lifestyle issues or co-morbidities such as smoking, diabetes or bruxism.
Loading protocols	Implants are loaded after a conventional period of 8 to 12 weeks.	Implants are loaded/temporarised immediately or soon after their placement (early loading).
Maintenance	Dental hygienist or clinician provides oral hygiene advice and manages implant mucositis or periimplantitis with non-surgical periodontal therapy	Surgical management of periimplantitis or implants that require removal by surgical approach.

Educational and Training Requirements

Replacement of dentition involving the straightforward placement and/or restoration of implants:

Before undertaking implant treatment, a dentist must develop competence in the procedures involved in clinical assessment, treatment planning, and the placement and restoration of implants. The skills and knowledge necessary for competence should be developed through a training course in implant dentistry, with a suitably trained and experienced clinician acting as a mentor. Treatment offered and undertaken must be evidence-informed and patient-centred. The dentist must use a contemporary decision-making process to critically appraise new products and techniques before using them, and to be qualified to perform such procedures, they must ensure they have the following minimum requirements:

1. At least one year full time study in a postgraduate clinical training program in surgical and prosthetic aspects of implants leading to a certificate or a diploma.

Or,

2. A Recognized certificate in Implant Dentistry with a minimum of 150 CPD hours multiple series of courses within 2 year and Evidence of a supervised clinical training, which include a clinical log book validated by the institution where the work was carried out [A log book of 15 patients with complete cases (surgical and prosthetic

parts) of various implant treatments; single and multiple on different sites of the upper and lower dental arches, regardless the number of implants per patient]

A dentist undertaking such implant treatment should have the necessary skills to:

1. Clinically assess a patient's suitability for implant therapy and undertake a risk benefit analysis, including the identification of any physical or medical conditions the patient has that could make them unsuitable for implant treatment or could complicate surgery.

2. Communicate well with the patient, to ensure s/he: is fully informed about other treatment options, and their relative indications and contra-indications, is fully informed about the advantages and disadvantages of using implant anchorage in restoring the appearance and function of their dentition gives consent prior to implant placement that is informed and valid.

3. Undertake appropriate imaging of the mandible and the maxilla, and interpret the findings to inform treatment.

4. Use aseptic surgical techniques.

5. Harvest hard and soft tissues from oral sites for localised alveolar augmentation.

6. Raise mucoperiosteal flaps and suture.

7. Use exogenous bone or bone substitutes for minor alveolar bone augmentation in the placement of implants.

8. Use appropriate pharmaceutical agents.

9. Undertake conventional restorative procedures.

10. Undertake straightforward implant-supported restorative procedures.

11. Diagnose and deal with complications occurring during or after treatment.

12. Monitor and maintain implants over time, including the repair and replacement of any implant or prostheses.

13. Document and audit all clinical activity.

Replacement of dentition involving the complex placement and/or restoration of implants:

A dentist must be surgically experienced in the placement and/or restoration of straightforward implants, as described above, before progressing onto the treatment of complex cases. Some clinicians may possess all the surgical and restorative skills needed to treat a complex case single-handedly, but this is the exception, and therefore it is likely that the planning and treatment of such cases will require a team approach. Different aspects of care may be undertaken by appropriately trained and experienced members of the multidisciplinary team. The prosthodontic team should be competent in managing the occlusal scheme, including changes to the vertical dimension and position of teeth and how these changes interact with the existing dentition (if present) and the jaw relationships. The placement of implants with complex bone augmentation demands a high level of surgical experience and significant ability to care for such patients. Dentists undertaking such treatment should have been trained and assessed by a suitably competent and experienced mentor within an appropriate structured programme: one that has enabled the dentist to achieve a standard in these specific techniques equivalent to trainees sitting a specialist examination in oral surgery. The trainee implant dentist must have developed competence in dealing with any immediate and long-term complications of the treatment provided.

Team approach:

Surgical aspect should be done by a specialist periodontist, or oral surgeon, and the prosthetic aspect should be done by a specialist in either prosthodontics or restorative dentistry. All specialist should have completed a full-time 2-3 year clinical training program approved by NHRA , specialists should provide their training syllabus and credit hours.

Single handed approach

1. A **prosthodontist** or a **restorative specialist** who wishes to perform complex procedures by his own, should provide evidence of completing 150 hours of CPD of courses in implant's **surgical** aspects and complete the treatment of 15 cases.
2. An **Oral surgeon** or a **periodontist** who wishes to perform complex procedures by his own, should provide evidence of completing 150 hours of CPD of courses in implant's **prosthodontic or restorative** aspects and complete the treatment of 15 cases.

Training Programs/courses:

The training programs/courses should have didactic, clinical-related hands-on simulation components with formal evaluation from a recognized training institute such as a recognized university or college and not from commercial companies.

Training Institutions in the Kingdom of Bahrain should be recognized by NHRA, Training Institutions from other countries should be recognized by an approved health regulatory authority in the country of origin.

Logbook requirements:

The logbook for Dental implant Privilege should include the following:

- Patient Biodata
- Medical history (assessment of risk factors)
- Dental History
- Pre-surgical assessment

- General dental and oral health assessment: Caries risk, periodontal health, (endodontic status of teeth adjacent to implant site).
- Prosthetic planning: Study models, design of prosthesis, Number and size of implants required (wax up and radiographic stent or digital stent).
- Surgical site assessment: Available space mesio-distally, bucco-lingually, inter-occlusally, anatomical limitation, and ridge assessment.
- Preoperative Radiographs, preferably CBCT, photographs.

- During Surgery :
  - Type of Anaesthesia
  - Type of implant placement: immediate, early, delayed, late.
  - Surgery details: Flap design, Implant system used, bone graft, soft tissue graft, membrane if any used, sutures, medication if prescribed.
  - Immediate post-surgical Radiograph.
  - Time line for healing.
  - Photographs.
- Post-surgical Management :
  - Second stage surgery (if required): flap design, size of healing abutment, suturing Technique.
- Prosthetic Management :
  - Impression Technique, provisional prosthesis.
  - Delivery of prosthesis.
  - Postoperative photographs.

Each case should be consented by the patient, **signed by the supervisors**, **with indication of level of supervision** *(one to one, assisting, distant)*, and all cases should be performed under **strict cross infection control**.

Dental Practitioner with implant privilege should provide 10 % of CPD hours per year in Implant Dentistry field.

Other Requirements:

- Practitioners who do not meet the above criteria and have other qualifications, degrees or certificates in implant dentistry and wish to apply for an implant dentistry privilege may apply for an individual review in which a panel of experts will assess the applicant's qualification and decide whether or not a privilege may be granted.

- An interview maybe be held for each practitioner who applies for a permission to practice dental implantology.

- As a mandatory requirement for each surgical procedure including dental implants placement, the patient should be fully informed about all appropriate treatment options and all the advantages and disadvantages of each option. Furthermore, this should be accurately recorded in patient's notes as a consent form signed by both the practitioner and the patient, stating that the patient was informed about all the surgical risks related to implant dentistry.

- Referral criteria to specialists should include all complex cases previously stated in the table.