Introduction to Dental Implant – Foundation Course.

Day 1

9.00 to 10am Lecture 1. Course Outline. Introduction to Implant terminology. (CB)

Learning Objectives:

- Candidates will understand the structure of the 5 day implant foundation course.
- Candidates will be introduced to the implant manufacturers available globally.
- Candidates will be introduced to and understand basic universal implant terminology, including:
    - Osseointegration.
    - Implant length, width and taper
    - Implant surface characteristics (Machined vs SLA vs Anodised)
    - Connection type (Internal and external)
    - Platform switching
    - Fixture level and Abutment level
    - Screw and Cement retained

10.00 – 10.45 am Lecture 2 Patient assessment and Examination. (SJ)

10.45 – 11.15am Tea

11.15 – 12.00 Lecture 3. Patient assessment and Examination. (SJ)

Learning Objectives:

- Candidates will understand the importance of a thorough patient assessment, and examination.
- Candidates will be introduced to the key areas that must be covered:

    History: Presenting complaint and history
    Wishes and desires. Are these realistic
    Dental history.
    Oral hygiene regime. Are they compliant?
    Importance of achieving oral health.
- Candidates will understand the importance of completing a full medical history before completing implant treatment.
    - Heart disease. Liver disease. Kidney disease. Bleeding and Healing. (what to do)
    - Diabetes (quantify risk – how to manage)
    - Bisphosphates (limits)
    - Smoking (quantify risks)
    - Previous radiotherapy
    - Management of above.
- Candidates will understand the key areas to examine in a thorough clinical examination for the future implant placement.

- Muscles of mastication
- TMJ
- Smile line
- Soft tissues – signs of parafunction and lip support
- Oral hygiene and periodontal disease
- Dentition
- Keratinised tissue volume.
- Occlusion. Static and Dynamic
- Size and shape of teeth. Size of edentulous spaces.
- Ridge palpation (limitations of this technique)
- SAC classification will be introduced

12.00 – 1.00 pm Lecture 4. Patient assessment. Special investigations. (JS)

Learning Objectives:

- Candidates will understand that special investigations are an essential part of working a patient up for implant treatment (highlight limitations of examination alone)

- Candidates will be understand the advantages and disadvantages of the various imaging techniques that are available.
  - Candidates will understand the different types of radiographic stents that can be used. How these are constructed and their limitations. IOPA. Limitations.
  - DPT – height of bone. General pathology. No 3D awareness.
  - Lateral Ceph. Height of anterior residual ridge. Good but only midline.
  - CT vs CBCT. What to image. What to ask for. Fields. Dosages.

- Candidates will understand the importance of prosthetic work up
  - Single tooth wax ups
  - Dentures
  - Use of prosthetic work flow and wax ups. What and where to wax.
  - Radiographic stents. Pros and Cons. How to make.
  - Introduction of digital workflow

1.00pm to 2.00pm LUNCH

2.00 – 3.00pm Implant surfaces (TBC)

3.00pm – 5.00pm Treatment planning table top

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Day 2

9.00 am to 9.45 am Lecture 1 Implant placement. Getting started. (MB)

Learning Objectives:

Candidates will understand the importance of a sterile surgical set up. They will understand the key basic instrumentation that is necessary for implant surgery.

Candidates with have an understanding of different flap designs

- Simple. Envelope, 2 vs 3 sided
- Where should relieving incisions be preformed
- Periosteal release

Candidates will have an appreciation of surgical guides:

- Tooth borne vs mucosa borne
- Tooth position, Pilot and fully guided.
- Manufacturing techniques

9.45 am to 10.30am Lecture 2 Implant placement. Placement protocols 1 (JY)

Learning Objectives:

Crown down approach
Candidates will understand the placement protocol time frames in implant placement.

- ITI placement protocol discussion. Immediate vs delayed

Candidates will understand the need for different implant length and widths

- Considerations with length, width and number.
- Anatomical considerations

Candidates will undertand the various staging protocols that are available

- Loading protocols. 2 stage, 1 stage, immediate load

Candidates will be introduced to grafting concepts

- Grafting. 2 stage vesus simultaneous.
- Block vs GBR.
- Newer techniques, titanium mesh, custom mesh, sausage technique.

10.45 am – 11.00 am Tea

11.00 am to 11.45am Lecture 3 Implant placement. Placement protocols 2 (JD)

Learning Objectives :

Candidates will appreciate the challenges of delivering implants to replace missing or traumatised teeth.

- Immediate vs Delayed
- Implants vs teeth
- The need for temporisation to achieve predictable emergence

11.45 am to 12.30 Lecture 4 - Anaesthetic, Sedation and Pain control (SS)

Candidates will understand the types of local anaesthetic and techniques that are needed to carry out implant placement.

- *Articaine vs lignocaine*
- *Blocks and infiltrations. Avoid blocks in the mandible.*
- *Is there a place for long acting locals.*

Indications and methods for IV sedation.
Post-operative pain control
Anti-inflammatories

12.30 to 1.00pm Lecture 5 Implant placement. Advanced techniques. (CB)

Learning Objectives:

Candidates will be given an awareness of advanced surgical techniques that are available:

- Zygomatics
- Nazilis
- Pterygoids
- Atrophic maxilla and mandible
- Soft-tissue augmentation
- Mini implants

1.00pm to 2.00pm LUNCH

2.00pm to 2.45 pm Steve Snook Innovations in Implantology

2.45 pm to 5.15pm IMPLANT PLACEMENT Table Top

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Day 3

9.00 am – 9.45am Lecture 1. Implant prosthetic introduction and overview (KM)

Learning Objectives:

Candidates will be given an overview of implant prosthetics. Candidates will have understand different types of implant prosthetic design

- Single crowns
- Bridges
- Abutment and fixture level restorations
- Overdentures
  - Bar overdentures
  - Stud retained overdentures
  - Locater retained overdentures

Candidates will be understand that different materials can be used to create the above restorations.

- Metal ceramic
- Metal acrylic
- Zirconia

9.45am – 10.30am Lecture 2. Implant single crowns and bridges (JL) Different systems get generic

Candidates will understand the difference between screw and cement retained crowns

- Superior aesthetic of cemented
- Ability to angle correct abutment
- Improved retention and resistance relative 20' uni abutments
- Screw retained more bulky. Retrievable.
- Simple to fit.

Candidates will understand the different types of implant bridges that are available

- Cantilever vs F-F
- Cantilevers where to place implant
- Implant – tooth (Generally No No)

Candidates will understand that metal frameworks must be passive.

- Candidates will appreciate how this achieved and how challenging it can be
- Verification jigs
- Sheffield testing
- Re-setting master model

Candidates will be introduced and understand implant Impression techniques

- Open vs closed tray techniques
- Special tray vs stock tray
- Internal vs external connection
- Fixture vs abutment level
- Seating radiographs
- Capturing soft tissue profile

Candidates will understand the process of fitting cement and screw retained prosthesis.

- Torque Wrenches.
- Different screw types.
- The importance of understanding torque
- The importance of cement control
- Importance of seating jigs
- Fitting custom abutments

10.30 am – 10.45am TEA

10.45am – 11.30am Lecture 3. Overdentures (CB)

Candidates will understand the following points about overdentures:

- When should we use
- Which attachment system
- Single attachments vs bars
- Different types of bars available
- When to use bars. Different ridge classifications.

11.30 am - 12.15 Lecture 4. Occlusal management of dental implants (SD)

Candidates will understand the correct occlusal management for the following prosthesis.

- Single crowns
- Bridges
    - 3 units
    - Full arch
    - Metal Ceramic. Acrylic. (MC more difficult)
- Removable

12.15 – 1.15 pm Nigel Saynor (Talk to TBC)

1.15 pm - 2.00 pm LUNCH

2.00pm to 5.00 pm Practical placement and Restorative Table Top

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DIGITAL TRAINING DAY

Day 4

9.00 am to 10.00am Introduction to Intraoral scanning. (GM)

10.00 am – 11.00am Design-Place-Scan-Restore. The digital workflow in fixed implant Prosthodontics. (GM)

11.00 am – 11.15am TEA

11.15 – 12.00 The digital workflow in removable implant Prosthodontics. Where do we stand. (GM)

Candidates will understand the following points about digital implant work:

- When should we use
- Workflow
- Digital planning
- Digital stent design
- Printing Digital stents
- Scanning intra-orally v Laboratory model scanning.
- Computer aided manufacture
- Printing versus milling.

3 lectures delivered by:

George Michelinakis DDS,MSc,MPhil,cert.(EPA)

Prosthodontist / Maxillofacial Prosthodontist at Crete Implants

12.00 – 1.00pm Speaker TBC

1.00pm – 2.00pm LUNCH

2.00pm – 5.00pm Practical

Candidates will understand how to upload CBCT scans and plan digitally implant placement.

3 digital planning software stations allowing training in:
SIMPLANT run by TBC
Blue Sky Bio run by Johanna Leven/Kevin Malin
Nobel Clinician run by Julian Yates

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Day 5

Candidates will understand the patient factors and experience following implant surgery and restoration.

9.00am – 10.45 am Reviewing patients in Prosthodontic clinical area (CB)

10.45- 11.00am TEA

11.00 am – 12.00 Sponsors Talk: Osstem. Immediate placement and loading using digital dentistry. (NO)

12.00 – 1.00pm Evidence based implantology: Review of the literature (CB)

1.00pm – 2.00pm LUNCH

2.00 – 3.00pm Evidence based implantology: Review of the literature (CB)

3.00pm – 3.15pm Planning your first case (CB)

3.15pm – 3.30pm Who wants to be an implantologist

3.30pm -4.00pm Course debrief (CB)

Lecturers in order of appearance:

CB: Professor Craig Barclay
SJ: Dr Sarra Jawad
JL: Johanna Leven
MB: Mr Mohamed Badr
JY: Professor Julian Yates
JD: Mr James Darcey
SS: Ms Shilpa Shah
SS1: Steve Snook
KM: Mr Kevin Malin
JS: Professor Julian Satterthwaite
SD: Mr Stephen Davies
NS: Mr Nigel Saynor
GM: Mr George Michelinakis
NO: Mr Nikhil Oberai