

DENTAL IMPLANT COMPLICATIONS

Scott Froum



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Dental Implant Complications

Scott H. Froum DDS, PC



SUMMARY



Topic:

How to avoid implant failure and surgical, prosthetic and occlusal complications.



Objectives:

- Possible complications associated with dental implants
- Case selection: medical, dental and social history
- Treatment of peri-implant diseases
- Prosthetic and occlusal complications
- Implant maintenance and legal considerations
- Implant surface decontamination with laser
- Techniques and tools to correct the initial osteotomy without any flap
- Recognize and treat dental implant complications
- Fix a failed dental implant
- Correct a malpositioned osteotomy while placing an implant



About the author:

Dr. Scott H. Froum is an expert in the realm of implant complications. He has lectured extensively throughout the country on the subject of implant complications. He has authored numerous papers and textbooks on implant problems and is one of the leading dentists in this field.

LEVELS

Difficulty ●●●
Theory ●●●●●
Practice ●●●

KEY INFO



English



On Demand



Implantology - Periodontics



5h 30min



10 Theory + 3 Clinical videos

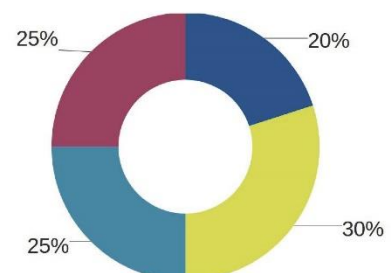


Clinical Yes



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SKILLS YOU WILL LEARN



- Peri-implantitis treatment
- How to avoid implant failure
- Implant maintenance
- Pre, Intra and Post-Operative considerations



Why to enroll:

- You'll be able to avoid the **most common prosthetic errors** by designing implants that **look like natural teeth** thanks to their anatomical emergence crown.
- You will **early diagnose** and **treat peri-implant disease** and you will minimize risk factors that might cause **future complications**.
- You will discover how to **analyse patients' dental, medical** and **social history** in order to properly plan the implant treatment.

Course description:

Dr. Scott H. Froum and **osteocom** welcome you to "**Dental implant complications**", a video course focused on the **prevention** and **management** of a wide range of factors that can lead implant treatments to **failure** and that make the treatment steps **more complex for the clinician**.

Some complications may be **relatively minor** and easy to correct while others will result in the **loss of the implant or prosthesis**.

Implant complications **are progressing quickly** and it's now mandatory for clinicians to have knowledge of the **possible corrective surgical** and **restorative treatments**.

This **comprehensive** and well-rounded video course will focus on the **problems** that can occur **before, during and after dental implant surgeries** and on what the clinician should do to deal with these problematic situations.

By attending this video course, you will deepen your knowledge of a **wide range of dental implant complications** as well as of effective prevention and treatment strategies.

This course is divided into **3 didactic modules**:

- **Pre-operative complications** and how to intercept what may go wrong
- **Intra- and post-operative considerations** and peri-implant and prosthetic diseases management
- Implant **maintenance**

Get ready to detect, treat and avoid dental implant complications by joining Dr. Froum's innovative and **highly educational** course enriched with **several clinical videos**.

Main topics covered in this course:

- **Possible complications** associated with dental implants
- **Case selection:** medical, dental and social history
- Treatment of **peri-implant diseases**
- Prosthetic and **occlusal complications**
- Implant **maintenance** and **legal considerations**
- Implant surface **decontamination** with laser
- Techniques and tools to **correct** the **initial osteotomy** without any flap or vertical releases

At the end of this course, you will be able to:

- **Recognize** and **treat** dental implant complications
- **Avoid** dental implant **complications**
- **Fix** a **failed** dental implant
- Safely **remove** a **failed implant**
- Perform **non-invasive soft tissue grafting** to cover a recession
- Correct a **mispositioned osteotomy** while placing an implant
- Understand the **biological** and **mechanical differences** between teeth and implants

This course includes:

- **10 theoretical** video lectures with several exemplifying clinical videos divided into 3 didactic modules
- **3 clinical** videos

Who the course is for:

This course is recommended to all **periodontists** and **implantologists** who want to deepen their knowledge of pre-, intra- and post-**surgical complications** and receive tips on how to detect, prevent and treat them.



MODULES AND VIDEO LECTURES:

Video Lecture 1 - An introduction to dental implant complications (3min)

Description:

In this brief **introductory video lecture**, Dr. Froum will present the **topics of the course** to participants.

The lecturer will explain the **importance**, for every professional, of studying **dental implant complications** in order to enhance their daily clinical implant routine and will show how peri-implantitis diseases are growing at an incredible rate.

In fact, according to Dr. Froum, for a clinician is now mandatory to understand **how to fix dental implants**.

1st MODULE: CASE SELECTION: MEDICAL, DENTAL AND SOCIAL HISTORY

Description of the module:

In this first didactic **module**, Dr. Scott Froum will discuss the **pre-operative considerations** in terms of patient's **medical, dental** and **social** history analysis. Specific attention will be paid to the importance of understanding the biological differences between teeth and implants.

Several **clinical cases** will be presented to let participants discover how to **properly plan** their implant treatments starting from a **correct preliminary case selection** phase.

The lectures of this module will focus on **multiple risk factors** involving implant failures and on **mechanical** and **biological differences** between teeth and implants.

Video Lecture 2 - Pre-operative workflow: case selection overview (11min)

Description:

The lecture will focus on the importance of understanding the biological differences between teeth and implants to properly plan treatments.

A **clinical case** will be presented to make participants understand **how implant treatments fail** if the clinician doesn't consider biological factors during the **planning phase**; a patient with **failing lateral incisors**, large bone loss and periodontal lesions and **infected sites** has been treated with two immediate implants placement and three years later these implants hurt and participants will notice a **shadow** on an implant and a **large probing depth** on the other one.

Dr. Froum will explain that both have failed because the clinician **didn't respect biological principles**.

In particular, this lecture focuses on the following topics:

- **Differences** between teeth and implants **biology**
- **Periodontal** sulcus VS **Peri-implant** sulcus
- Different **inflammatory responses** between teeth and implants

- **Soft tissues healing** response differences between teeth and implants
- **Mechanical differences** and differently **distributed forces** between teeth and implants

Video Lecture 3 - Case selection: patient's medical history analysis (35min)

Description:

Thanks to this video lecture, participants will appreciate the **analysis** of the **major topics** of **medical history** that have to be considered and analyzed when planning an **implant treatment**.

Dr. Froum will discuss about **age, diabetes, osteoporosis** and other **unstable conditions** focusing on the role played by these factors on dental **implants success rate**.

Participants will be shown how to **conduct the preliminary interview** with the patient in a way that **gathers any significant data** on his medical history.

Several **clinical videos** will be analyzed to better understand, through **concrete examples**, how these factors can cause **implant failure**.

In particular, this lecture focuses on the following topics:

- How does **age** affect our implant treatments?
- How to manage patients with **poorly controlled diabetes**
- The differences between **osteoporosis** and **osteonecrosis** of the jaw
- The common medical conditions that may **affect implant success rate**
- **Implant placement** in patients with **osteoporosis**
- How to detect **titanium allergies**
- The importance of doing an extensive **medical history check** to **prevent periodontal disorders**

Video Lecture 4 - Case selection: patient's dental and social history analysis (30min)

Description:

After talking about medical history collection, Dr. Froum will now focus on the **analysis** of patients' **dental** and **social history**.

An analysis of **caries, periapical pathologies, periodontal health** of the adjacent teeth and of the **overall periodontal status** will be performed in order to highlight how these factors can **influence implant treatment's success rate**.

Participants will also find out which general **social factors** you need to take care of to reach perfect outcomes such as **smoking, vaping** and **drinking** habits.

In particular, this lecture focuses on the following topics:

- **Caries assessment:** implant induced decay, high or low risk of caries
- Can we **place implants** into an **extraction socket** that's affected by a periapical pathology?
- How to analyse patients' **overall periodontal status**
- **Low Level Laser Therapy** to decontaminate the bone graft area
- The influence of **smoking** on implant failure
- **Alcohol** effects on dental implants

2nd MODULE: SURGICAL INTRA-OPERATIVE AND POST-OPERATIVE COMPLICATIONS

Description of the module:

In this second module, Dr Froum will analyse a **wide range of surgical complications** that can occur while performing an implant surgery that can cause **implant failure** or other disorders.

The specialist will also illustrate **post-operative complications, peri-implant** and **prosthetic diseases** management strategies, and the relationship between **occlusal complications** and implant failure.

By attending the following lectures, you will deepen your knowledge of the proper **intra- and post-operative procedures** and you will be able to intercept **potential hazards** and **risk factors** in time.

Video Lecture 5 - Intra-operative complications in implant dentistry (50min)

Description:

This video lecture will focus on **intra-operative complications** that may happen during **implant surgeries** that can cause implant **failure**.

Dr. Froum will discuss the proper **surgical procedures** to **avoid intra-operative complications** such as **overheating** the bone, **contaminations, violations** of adjacent anatomical structures and implant **mispositioning**.

Each of these factors will be analysed in detail and participants will be provided with **tools to overcome these issues**.

In particular, this lecture focuses on the following topics:

- Intra-operative **risk factors**
- How to **avoid bone overheating** while performing osteotomy
- **Contamination analysis** and how to avoid it
- How to manage **implant's violations** of adjacent structures

- **Implant misplacement** and tips to reach the correct buccal-lingual, mesial-distal and apical-coronal position

Video Lecture 6 - Treatment of peri-implant diseases (1h 23min)

Description:

In this video lecture Dr. Froum will speak about **post-operative complications** or what happens after the implant placement phase, paying particular attention to **peri-implant diseases** and on **how to treat them**.

Participants will understand Dr. Froum's model to **classify implant complications** and, thanks to **several clinical clips**, they will see how to manage **peri-implantitis** and **mucositis** severe cases.

In particular, this lecture focuses on the following topic

- **Definition** of **peri-implantitis** and peri-implant **mucositis**
- **Diagnosis** of peri-implant mucositis and peri-implantitis: **clinical signs**
- How to **diagnose** peri-implantitis and peri-implant **soft tissue deficiencies**
- **Risk factors** for peri-implant diseases and peri-implantitis **classification**
- **Non-surgical** and **surgical therapies** for peri-implant diseases
- The rationale for **laser use** to **decontaminate** implant surface and the adjacent soft tissues

Video Lecture 7 - Prosthetic complications (30min)

Description:

By attending this video lecture, you will deepen your knowledge of some of the most **common prosthetic complications** and how they are related to implant failure.

Dr Froum will show you which strategies to adopt to prevent these problems by **designing implants** that look like **natural teeth** thanks to their **anatomical emergence crown**.

In particular, this lecture focuses on the following topics:

- Different **types** of **emergences** in the implant crown
- How do we **create** an **anatomical emergence**?
- **Anatomical instructions** for an aesthetic sculpturing of the gingiva
- How to make tissue **more resistant to damages** thanks to soft tissue grafting
- **Peri-cementitis** definition

Video Lecture 8 - Occlusal complications (16min)

Description:

In this final video lecture of the second module, Dr. Froum will analyse a **wide range of occlusal complications** that might lead to **implant failures**.

Prosthetic techniques to ensure **restoration embrasure** form, to **prevent peri-cementitis** and **late-stage complication** will be presented.

A specific focus will be also put on **soft tissues augmentation** techniques to increase the keratinized tissue around dental implants to **prevent bacterial assault** and tissue migration and on the strategies to **recognize** and prevent **occlusal disharmonies**.

In particular, this lecture focuses on the following topics:

- How does **implant occlusion affect** implant dentistry?
- **Biomechanical differences** between teeth and implants
- Lever **arm length** and **stress** loaded on the implant fulcrum
- Implant **screw loosening** causative factors
- How to **manage screw failure**

3rd MODULE: IMPLANT MAINTENANCE AND USEFUL LEGAL CONSIDERATIONS**Description of the module:**

In this **final module**, Dr. Froum will talk about **implant maintenance** and **legal considerations**. According to the lecturer, this is a very important didactic module because implant maintenance phases are designed to **keep professionals out of legal problems**.

Participants will understand that implant maintenance is a **full-proof check** to ensure **implant long-term stability** and to **avoid late-stage implant failures**.

Several **clinical clips** will be shown for exemplary purposes.

Video Lecture 9 - Implant maintenance (20min)**Description:**

In this lecture Dr. Froum will show participants the **proper instrumentation** that has to be used to enhance **implant hygiene** and will discuss about the main goals of **maintenance therapy**.

According to Dr. Froum, implant maintenance phases are very important because **patients don't think that they have to take care of their dental implants**.

So, the main goals of maintenance therapy are to **debride bacteria** without damaging the implant or the abutment, to use **specifically indicated hygiene instruments** and to remove large implant supported restorations to **properly clean under them**.

In particular, this lecture focuses on the following topics:

- How to **debride implants** without damaging their surface
- **Examples** of cases in which the used instrumentation **damaged the abutment** promoting peri-implant **disease progression**
- **Scalers** and interproximal devices
- Why it is recommended to **avoid chlorhexidine**

Video Lecture 10 - Legal considerations in implant dentistry (25min)

Description:

In this last video lecture, Dr Froum gives you some useful advice regarding how to avoid post-operative legal complaints from unsatisfied patients.

In particular, this lecture focuses on the following topics:

- Implant-friendly instrumentation
- Implant commodification
- How to manage or avoid inferior alveolar nerve violation
- The importance of having a proper consent form

Video Lecture 11 - Clinical video: Atraumatic removal of a fixed implant (2min)

Description:

Thanks to this brief **clinical video**, participants will appreciate the **explantation** of an **old implant** placed twenty years ago that is no longer useful.

The use of the **torque** to **dislodge the implant** will be shown and commented in a step-by-step modality.

After having extracted the implant, the surgeon will **detoxify** the **post-extraction socket** paying attention to the removal of any **residual metal shards**.

In particular, this lecture focuses on the following topics:

- Implant **explantation** protocol
- The advantages of using a **trephine bur** to remove implants
- Implant **osteotomy detoxification** and cleaning
- The use of **chemical detoxifiers**

Video Lecture 12 - Clinical video: Implant surface laser decontamination (8min)

Description:

In this **clinical video**, Dr. Froum will show how to **decontaminate** the **implant surface** in case of a **severe perimplantitis**.

Participants will discover the **advantages** of using a **laser** to **debride** the area of the defect to **degranulate** the **implant surface** without damaging his macro-structure. After having decontaminated the defect, Dr. Froum will place a **bovine collagen matrix** and a PRF membrane into the defect area.

In particular, this lecture focuses on the following topics:

- The elevation of a **full-thickness flap**
- **Granulation tissue** removal from the perimplantitis defect area
- Decontamination of the **bacteria** on the implant surface
- **Suture** protocol

Video Lecture 13 - Clinical video: incorrect osteotomy management (3min)

Description:

In this **final clinical video** Dr. Froum will show participants how to deal with an **incorrect initial osteotomy** by **redirecting** and **shaping** it thanks to the use of a **Lindeman bur**.

Once the final preparation has been made, Dr. Froum will place the implant with a **healing abutment**.

REFERENCES:

- **"Have infection, will travel: paving the path to dental implant failure"** by S. Froum, Apr19, 2016, Perio-Implant Advisory.
- **"Postextraction treatment: did your bone graft fail or did you fail your bone graft?"** by S. Froum, May 16, 2016.
- **"Dental implant failure: 3 common medical conditions that may affect success rates"** by S. Froum, Dec 9, 2019, Perio-Implant Advisory.
- **"Top 5 anatomical differences between dental implants and teeth that influence treatment outcomes"** by S. Froum, Sep 12, 2017, Perio-Implant Advisory.
- **"Long-term outcomes of immediate implant placement into infected sockets in association with immediate loading: a retrospective cohort study"** by E. Anitua.
- **"Vaping and oral health: it's worse than you think"** by S. Froum, Jan 10, 2019, Perio-Implant Advisory.
- **"Peri-implant mucosal tissues and inflammation: clinical implications"** by S. Froum, 2015, IJPRD.



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Author's Biography:

Dr. Scott H. Froum is an expert in the realm of implant complications. He has lectured extensively throughout the country on the subject of implant complications. He has authored numerous papers and textbooks on implant problems and is one of the leading dentists in this field.

