

A portrait of a middle-aged man with a beard and mustache, smiling. He is wearing a light blue dress shirt and a yellow tie with a small blue floral pattern. The background is dark blue with vertical light blue streaks.

HORIZONTAL AND VERTICAL PREPARATION

GIANLUCA PANIZ

Horizontal and Vertical Preparation

By Gianluca Paniz DDS, MS, PhD



SUMMARY



Topic:

New paradigms in the selection between vertical and horizontal tooth preparation



Objectives:

- Horizontal and Vertical tooth preparation features
- Differences and similarities between horizontal and vertical preparation protocols
- Selection criteria between horizontal and vertical preparation
- Which factors have to be considered during the treatment planning phase?
- Properly evaluate the site, the patient and the clinical aspects to select the best tooth preparation for every specific case
- Plan your preparations by using a digital intraoral scanner



About the author:

Dr. Paniz is specialized in Prosthodontics on natural teeth and implants with a particular focus on esthetic dentistry. He is a National and international lecturer and author of different scientific publications.

LEVELS

Difficulty Advanced

Theory ●●●

Practice ●●●●●

KEY INFO



English



On Demand



Prosthodontics



5h



5 Theory and 4 clinical videos

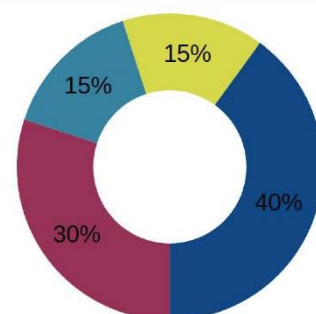


Clinical Yes



NO

SKILLS YOU WILL LEARN



■ Tooth Prep Selection Criteria

■ Patient Analysis

■ Site Analysis

■ Clinical Procedures



Why to enroll:

- Dr. Paniz will share with participants his **thought process** that involves the **analysis** of the **patient**, of the prosthetic **site** and of the **clinical procedures**.
- The **criteria** to properly select the **correct preparation** between a horizontal and a vertical one will be deeply discussed.
- Dr. Paniz will show how to **digitally plan** tooth preparation to **fasten** and **simplify** the tooth preparation treatment planning phase.

Description of the course:

The **choice** between **vertical** and **horizontal preparation** is traditionally based on clinician's **personal considerations**, habits and professional experience.

In this video course it will be explained how, instead, there are **clear paradigms** that must be followed during teeth preparation selection process between horizontal and vertical protocols.

Dr Paniz, in collaboration with **osteocom**, welcomes you to “**Horizontal and Vertical Preparation**”, the new video course on **prosthetic preparation** that aims to offer participants a set of **clear guidelines** to follow in order to implement the best preparation for **each specific clinical case**.

The video course is based on the **analysis** of **three macro factors** that the clinician must be able to evaluate: the **site** of the preparation, the characteristics of **each specific patient**, and the different degrees of **complexity** of the **surgical procedures** resulting from the type of preparation performed.

Participants will have the opportunity to analyse **every clinical step** of Dr. Paniz preparation protocol thanks to four complete and commented **clinical videos** that will focus on **digital preparation**, **tooth prep**, definitive **impression taking** and final **cementation**.

In particular, during this course, Dr Paniz will speak about:

- Horizontal and Vertical **tooth preparation** features
- **Differences** and **similarities** between horizontal and vertical preparation protocols
- **Selection criteria** between horizontal and vertical preparation
- Which factors have to be considered during the **treatment planning phase**?

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

- Properly **evaluate** the **site**, the **patient** and the **clinical aspects** to select the best tooth preparation for every specific case
- Plan your **preparations** by using a digital intraoral scanner

- Manage like a pro every preparation case, even the more **complex ones**
- Take a **definitive impression** and **cement** the restoration in a fast and predictable way

Who the course is addressed to:

Attending this course is strongly recommended for **prosthetic professionals** who want to **increase** their **effectiveness** and **predictability** by discovering how to select the **right tooth preparation technique for each specific case**.

There's no particular discrimination for either **experienced** or **young clinicians**; all will **benefit** and **update** themselves thanks to this **comprehensive** and **highly didactic** video course.



Video Lectures:

Video Lecture 1 - Introduction to Horizontal and Vertical tooth preparation (5min)

Description:

Dr. Paniz will briefly **introduce** you to the topics that will be covered during the **next video lectures**.

The lecturer will explain that traditionally, the choice between horizontal and vertical preparation was dictated by **clinician's personal preferences** but participants will understand that there is the need to adopt a **case by case selection approach**.

In fact, the clinician has to deeply analyse the **site**, the **patient** and the **clinical procedures** in order to select a horizontal margin or a vertical one.

In particular, this lecture focuses on the following topics:

- **Site:** existing sub-gingival restorations, tooth vitality, perio conditions, abutment shade
- **Patient:** esthetic expectations, perio conditions, oral hygiene, smoking habits, perio phenotype
- **Clinical procedures:** tooth prep, provisionalization, definitive impression, communication with dental technicians, cementation, maintenance

Video Lecture 2 - Site considerations in margin design selection (43min)

Description:

The video course starts with an **introductory presentation** of the **selection criteria** between horizontal and vertical preparation in order to help participants getting

advantages by utilizing the **most appropriate margin design** for each specific clinical case.

Dr. Paniz will analyse the **clinical indications** of both **supra and sub-gingival margin position** and, finally, participants will discover the **5 key points** that every clinician must take into consideration during the **preliminary diagnostic phase** in order to properly select the correct approach between horizontal and vertical teeth preparation.

In particular, this lecture focuses on the following topics:

- Horizontal and Vertical Preparation **selection criteria**
- **Supra-gingival VS Sub-gingival** margin position
- The **advantages** and the **difficulties** of the two different approaches
- Analysis of the **site**: periodontal conditions, tooth vitality and presence of existing sub-gingival restorations
- Analysis of the **patient**: esthetic expectations and periodontal phenotype
- **Tooth prep**, provisionalization, **impression** and the **communication** with the dental lab

Video Lecture 3 - Patient consideration in margin design selection (37min)

Description:

By attending this video lecture, participants will deepen their knowledge about the **features** of vertical and horizontal **finish lines** in teeth preparation.

Dr. Paniz will discuss the **properties** of the **vertical finishing line** without a defined margin and the characteristics of the **horizontal sharp line** with a clear finishing chamfer.

In the second part of the presentation, the focus of the lecturer will shift on the factors of the patient that every clinician must take into consideration when selecting between vertical and horizontal preparation; patient's **esthetic expectations**, **periodontal phenotype**, **medical history** and **oral hygiene** will be analyzed in detail with a particular attention paid to patient's smoking habits.

In particular, this lecture focuses on the following topics:

- Differences between **thin-scalloped** and **thick-flat tissues**
- **Periodontal conditions** and oral hygiene analysis: presence of plaque and periodontitis
- **Gingival recessions** and gingival **inflammations** related to patients' smoking habits
- **Patients' esthetic expectations**: gingival scalloping, tooth discoloration and soft tissues symmetry

Video Lecture 4 - Tooth preparation and Provisionalization clinical comparison (1h)

Description:

In this lecture, tooth preparation clinical procedures will be deeply analyzed paying attention to the **different difficulties** of each clinical phase depending on whether vertical or horizontal preparation is adopted.

In this presentation, Dr. Paniz will discuss about **tooth preparation** and **provisionalization** phases while **definitive impression** and **dental lab procedures** will be covered in the next lecture.

In particular, this lecture focuses on the following topics:

- **Intra-sulcular** chamfer VS **Sub-gingival** featheredge
- Interferences with the **root morphology**
- A focus on the use of the **retraction cord** in the horizontal preparation
- Horizontal and Vertical Prep different **levels of invasivity**

Video Lecture 5 - Definitive Impression Procedure and Lab Communication clinical comparison (1h 5min)

Description:

According to the **selection of horizontal or vertical preparation** there are differences in the impression taking phase and in the way of communicating with the **dental laboratory**.

Participants will discover that **definitive impression taking** is more complex with the horizontal prep while the communication with the dental lab is more difficult with the vertical one.

Dr. Paniz will show his **standardize digital definitive impression taking protocol** and will explain how **digital technologies** can make the communication with the dental laboratory faster and easier.

In particular, this lecture focuses on the following topics:

- **Goals** and **objectives** of definitive impression
- **Digital VS Analogue** impression techniques
- Gingival **retraction** technique
- How to properly communicate with the **dental technicians**

Video Lecture 6 – Clinical video: provisionalization (53min)

Description:

In this **first clinical video** the **provisionalization** phase for **veneers** on teeth number **2.1** and **2.2** will be shown and discussed in detail.

Participants will appreciate the **digital impression** of the provisional restoration with an **intraoral scanning system** and the digital scan of the lower and upper arches which will be followed by an efficient **interocclusal registration**. Then, every phase of tooth preparation will be presented.

In particular, the lecture focuses on the following topics:

- The **recording** of the study model with an **intraoral scanning system**
- How to execute **depth cut** on the dental surface
- The occlusal, interproximal and axial **reduction protocol**
- The use of cords to generate a **retraction effect**
- **Polymerization** of the provisional prosthesis

Video Lecture 7 – Clinical video: provisional veneers (30min)

Description:

A patient has **two chief complaints**: wants to improve the esthetic of her anterior four teeth and also **replace the restorations** on elements 2.4 and 2.5 and there's also a **fistula** on the buccal aspect of tooth number 1.1.

Dr. Paniz will place three porcelain laminate **veneers** on the lateral incisors and on tooth number 1.2 and an **implant supported crown** on element 1.1.

This is a clinical case that will also require an **orthodontic treatment** to increase the length of the anterior teeth.

In particular, the lecture focuses on the following topics:

- Two dimensional **previsualization** on photographs to start planning the treatment
- The **removal** of the existing and **compromised implant** on element 1.1
- The **evaluation** of **soft tissues' quality** around implants and veneers

Video Lecture 8 - Clinical video: definitive impression taking (10min)

Description:

In this **clinical video**, Dr. Paniz will share with participants the **impression taking protocol** in a situation in which two **premolar teeth** have to be **vertically prepared** with margin design.

The process will be executed by **paking two cords**; the first one will be used to **mark the bottom of the sulcus** while the second one will have the goal to widen the sulcus facilitating the entry of **impression materials** into the sulcus.

In particular, the lecture focuses on the following topics:

- Removal of the **provisional restoration**

- Residual **abutments' polishment**
- **Digital intraoral scanner** to achieve a clear definitive impression
- How to **improve the quality** of impression details
- Which are the **advantages** of a **digital** definitive impression?

Video Lecture 9 - Clinical video: final cementation protocol (10min)

Description:

After having seen the definitive impression taking protocol, participants will now appreciate the **standardize final cementation** protocol adopted by Dr. Gianluca Paniz.

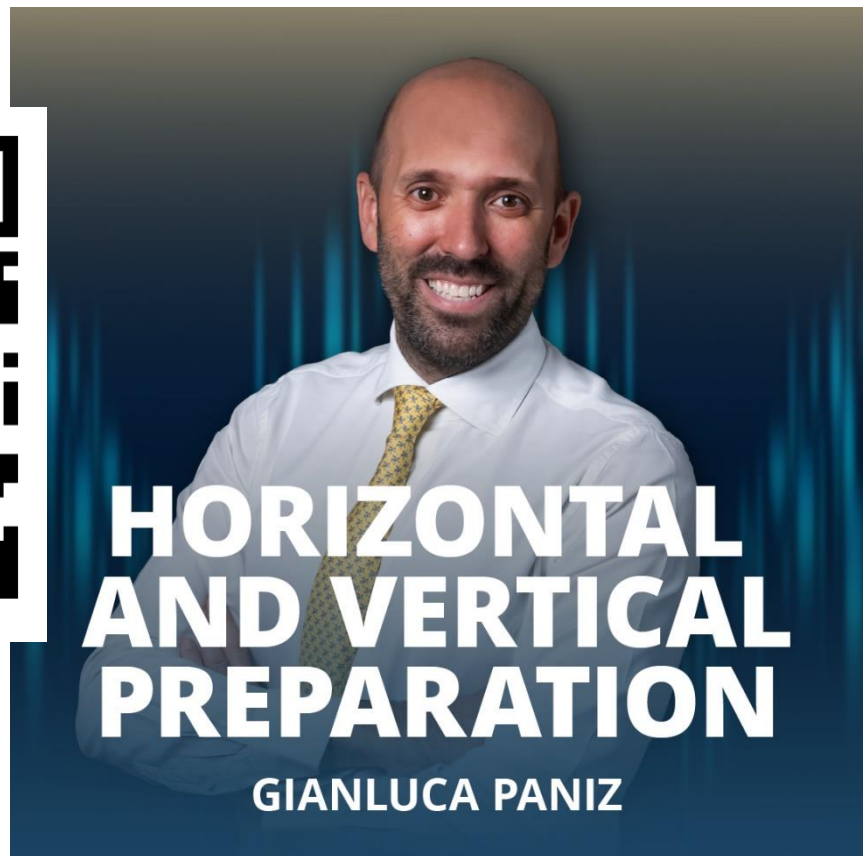
Every phase of the cementation protocol will be **shown and commented** in a **step-by-step** modality.

In particular, the lecture focuses on the following topics:

- **Soft tissues' quality evaluation** after the removal of provisional restorations
- How to properly check the **contact area**
- The evaluation of restorations **internal fit**
- **Polymerization process** on both buccal and palatal site



Scan the code
and enter the
course



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