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'Finish Lines'- The Cardinal step in Tooth-Preparation- A Succinct Review

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ABSTRACT: The edge or margin of the prepared tooth surface where the prosthetic restoration will end is known as the "finish line" in fixed partial dentures (FPD). The fit, seal, and aesthetics of the restoration are all significantly impacted by this limit. To guarantee that the restoration seats precisely and follows the gingiva's natural contours, the finish line offers a clear edge for seating. The final seating of restorations and the precision of impressions are both influenced by finish line visibility. Though in tooth preparation, the finish lines play a crucial role, but not much of review literature is available. Hence this brief review article aims to discuss, different finish lines, their significance and selection criteria of finish lines.

KEYWORDS: Finish Lines in FPD, Modifications of Finish Lines, Chamfer Finish Line, Shoulder Finish Line.

I. INTRODUCTION

In FPD (Fixed Partial Denture), the finish line is the frontier amid the prepared tooth structure and the restoration. Choice of the appropriate finish line design is pivotal because it affects marginal integrity, periodontal health, esthetics, and the longevity of the prosthetic restoration. Here are the primary finish line types commonly used in FPDs:

1. The chamfer finish line is the rounded, smooth border that separates the cavosurface from the axial wall. Because of their superior stress distribution and conservative character, chamfer finish lines are commonly utilised for metal and metal-ceramic crowns.
2. Shoulder Finish Line: Usually found in ceramic and porcelain-fused-to-metal crowns, this style has a flat, horizontal finish. Because of its large surface area, the shoulder ensures that ceramic materials have enough thickness.
3. Bevel Finish Line: Frequently found in partial coverage restorations, this style features an angled edge on the tooth preparation's edge. It lessens marginal difference and enables improved adaption of metal restorations.
4. Knife-edge Finish Line: When little tooth reduction is needed, this thin finish line is frequently utilised. Because of the possibility of inadequate material thickness and the possibility of distortion in certain situations, it is less prevalent. [1,2]

II. CRITERIA FOR DESIGNING A FINISH LINE IN FPD

1. Compatibility of Materials

- The chosen restorative material and the finish line design must work together. For example:

Chamfer or knife-edge finish lines are advantageous for metal restorations because they are conservative and offer adequate marginal adaptability.

For porcelain-fused-to-metal (PFM) crowns to be strong without being bulky, they need a chamfer or shoulder with a bevel.

A flat shoulder is necessary for all-ceramic restorations in order to offer sufficient material thickness and reduce the possibility of chipping or fracture. [1]

2. Adaptability and Marginal Integrity

- To guarantee the durability of the restoration and stop microleakage, the finish line should support a precise and tight marginal fit.

Long-term success depends on improved adaptability and a reduction in stress concentration at the margin, which is achieved by finish lines with rounded internal angles (chamfer, for example). [2]

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3. Preservation of Dental Structure

- To guarantee dental strength and reduce sensitivity, the final line should let the least amount of tooth structure to be removed, maintaining as much natural enamel and dentin as possible.
- While shoulders with a bevel may require more reduction but offer more stability for specific materials, chamfer and knife-edge finish lines are typically more conservative. [3]

4. Assessment and Placement Simplicity

- The finish line ought to be clearly visible and enable accurate restoration seating. For ceramic crowns, a shoulder finish line is frequently chosen because of its clear sight and simplicity in creating impressions. [4]

5. Health of Soft Tissue and Marginal Position

- The finish line should be positioned carefully to preserve periodontal health and prevent impingement on soft tissues. In order to increase cleanability and lessen irritation, a supragingival or equigingival margin is frequently chosen. [5]

6. Retention and Resistance

- The finish line should be made to give the crown or FPD enough resistance and retention. For PFM restorations, for instance, a bevelled shoulder finish line improves resistance shape. [6]

III. VARIOUS CLASSIFICATIONS OF FINISH LINES

In fixed partial dentures (FPD), finish lines are classified according to their margin configuration, depth, and shape. Each classification influences the ultimate restoration's adaptability, aesthetics, and longevity by being appropriate for various restorative materials and clinical settings. This is a summary of the primary finish line classifications:
Finish Line Classifications

1. Based on Shape

Chamfer Finish Line: A tapered diamond bur with a round end creates this concave, curved finish line. Because of their conservative character and capacity to offer an exact margin, chamfers are frequently chosen for metal and metal-ceramic restorations. [2] Shillingburg HT et al. claim that the chamfer is a dependable option for maintaining tooth structure and enabling the best possible fit for restorations made of metal. [2]

Shoulder Finish Line: This style, which offers a wide surface area for ceramic strength and aesthetics, has a flat, horizontal finish and is frequently utilised for ceramic or porcelain-fused-to-metal crowns. [1] Because ceramic restorations require bulk material to prevent fractures, shoulder finish lines are perfect, according to Rosenstiel SF. et al. [1].

Shoulder with Bevel: To improve adaptability and reduce marginal differences, this design has a shoulder margin with an additional bevel. In PFM restorations, it is frequently utilised. [3] According to Goodacre CJ and associates, restorations that need a firm, precise fit between metal and tooth structure benefit from shoulders with bevel finish lines. [3]

Knife-edge Finish Line: This type of finish line is less popular since it lacks bulk support for the material, which might result in slight variations. It is characterised by a thin, tapered edge. [4]

2. Based on Depth

Heavy Chamfer: A deeper variation of the chamfer finish line that works well with thicker materials that need more bulk for strength, such as lithium disilicate or zirconia.
Light Chamfer: Used for metal and metal-ceramic crowns, its shallower chamfer allows for more cautious preparations. [2]

3. Based on Marginal Configuration

Supragingival Finish Line: This finish line is best suited for situations where aesthetics are not as important because it is easier to clean and less likely to irritate soft tissues. It is positioned above the gingival margin. The Equigingival Finish Line, which is situated at the gingival margin's level, strikes a balance between cleanliness and aesthetics.
Subgingival Finish Line: Often utilised in anterior restorations, this line is positioned for aesthetic reasons beneath the gingival margin. To prevent impinging on the biologic width and producing irritation, it must be placed carefully. [6]

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4. Based on the Clinical Purpose and Tooth Preparation Requirements

Feather-edge Finish Line: Also referred to as a "knife-edge" or "slight chamfer," this finish line involves little tooth loss and is occasionally utilised for complete metal crowns. [6]

Radial Shoulder: Often used for ceramic restorations to improve fracture resistance, its rounded shoulder design equally distributes stresses.

IV. INDICATIONS AND CONTRA INDICATIONS FOR EACH FINISH LINE

Depending on the restorative material, aesthetic requirements, and clinical setting, each type of finish line has distinct indications and contraindications. The following provides a thorough summary of the main finish line types' indications and contraindications:

1. Chamfer Finish Line

Because it can produce a smooth marginal transition and reduce teeth conservatively, it is preferred for metal and metal-ceramic restorations. Ideal for zirconia crowns and certain all-ceramic restorations, especially where a modest margin thickness is acceptable, and aesthetics are not as important. Suggested in situations where preserving tooth integrity requires a modest loss in tooth structure. [2] Because of their strength and conservative design, chamfer finish lines are advised for metal-ceramic restorations, according to Shillingburg HT et al. [2]

- Restrictions:

It is not the best option for extremely beautiful all-ceramic restorations because it lacks the mass necessary for translucent ceramics, which increases the danger of breakage. Avoided when a shoulder margin would offer superior support or fit, particularly for all-ceramic crowns that need a lot of thickness. [1] Chamfer finish lines work less well for all-ceramic crowns that require more bulk for strength and aesthetics, according to Rosenstiel SF et al. [1]

2. Shoulder Finish Line

Perfect for all-ceramic restorations (such as zirconia, lithium disilicate, and feldspathic porcelain) where sufficient thickness is required to prevent fractures. Because it gives translucent materials enough thickness, it is frequently employed in anterior restorations that demand great aesthetics. It is appropriate for porcelain-fused-to-metal (PFM) crowns since it gives the ceramic material a solid base. [6] The shoulder finish line is perfect for zirconia and all-ceramic crowns because it gives the required material thickness for aesthetic restorations, claim Raigrodski AJ et al. [6]

- Restrictions:

It is not recommended for teeth with thin enamel or weakened structure since it necessitates a greater loss in tooth structure. Not recommended for full-metal crowns since it reduces the crown needlessly and offers no extra advantages. [3] Shoulder finish lines should be avoided when maintaining dental structure is a top concern, according to Goodacre CJ et al. [3]

3. Shoulder with Bevel Finish Line:

Often utilised in PFM restorations, the bevel enhances adaptability and lessens marginal discrepancies, particularly when subgingival margins are required. Appropriate for posterior restorations in particular, where adaptability and restoration retention are top concerns. [4] Dumbrigue HB and colleagues concluded that when PFM restorations require exact marginal fit and adaption, a shoulder with bevel is advised.

- Restrictions:

Unsuitable for all-ceramic restorations because the bevelled edge may not offer enough support, increasing the chance of chipping in fragile materials. Because the shoulder bevel finish necessitates extensive preparation, it is not recommended for situations requiring little tooth reduction. [1]

o According to Rosenstiel SF and his associates, bevel-finished shoulders are incompatible with all-ceramic crowns because they may result in fractures due to the creation of unsupported zones. [1]

4. Knife-edge Finish Line:

Used occasionally for full-metal crowns, particularly when maintaining the tooth's structural integrity is essential. Suitable for posterior teeth or places where a small border is sufficient and aesthetics are not the main consideration. [3] The knife-edge finish line is a possibility for full-metal restorations where minimum reduction is required since, according to Goodacre CJ et al., it is minimally intrusive. [3]

- Restrictions:

It is not appropriate for PFM or ceramic restorations since it lacks the bulk required to support ceramic materials, which could result in fractures and uneven margins. It is not recommended when accuracy and marginal fit are crucial because

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it is hard to detect during impression-making and restoration seats. [6] Knife-edge margins can cause ceramic fractures, which restricts their usage in aesthetic crowns, according to Raigrodski AJ et al.

5. Feather-edge Finish Line:

Often used in posterior regions for full-metal crowns where aesthetics are less important, where very little tooth reduction is required. Suitable for teeth that require the preservation of the greatest amount of tooth substance due to structural weakness.

- Restrictions:

Not appropriate for ceramic or PFM crowns because it lacks sufficient thickness for these materials, which need bulk to be strong. Because it's difficult to get a tight seal, it shouldn't be utilised in highly aesthetic regions or where an exact marginal fit is required. [1] According to Rosenstiel SF et al., feather-edge finish lines are not recommended for all-ceramic crowns because they do not provide enough support for these materials. [1]

V. ADVANTAGES AND DISADVANTAGES OF EACH FINISH LINE

The type of restorative material, aesthetic standards, and tooth structure preservation all influence the finish line selection in fixed partial dentures (FPD). The longevity, fit, and aesthetics of the restoration can all be impacted by the distinct benefits and drawbacks of each finish line style. This is a thorough analysis of each finish line's benefits and drawbacks:

Chamfer Finish Line

- Benefits:
  - Conservative Preparation: More of the natural tooth structure is preserved since the chamfer requires less tooth reduction than a shoulder finish line.
  - Good Marginal Integrity: This finish line delivers a steady interface and a smooth, continuous margin, lowering the possibility of chipping at the edges.
  - Suitable for a Variety of Materials: Because of their smooth, rounded shape, chamfer finish lines complement metal, metal-ceramic, and some ceramic restorations. [2]
- Drawbacks:
  - Not Perfect for All-Ceramics: Chamfers might not offer sufficient bulk for high-stress regions or for restorations that need to be translucent, like crowns made entirely of ceramic.
  - Needed Precision: It can be difficult to get a consistent chamfer, especially if the margin is too deep, which could result in an over-prepared margin. [1]

Shoulder Finish Line

- Benefits:
  - Offers Sufficient Bulk for Ceramics: The shoulder finish line's flat, horizontal border lowers the danger of fracture by providing sufficient material thickness for ceramic restorations.
  - Good Marginal Adaptation: This enhances fit and aesthetic results, particularly in anterior regions, by enabling better seating and adaptation of ceramic restorations.
  - High Aesthetic Value: Shoulder finish lines are perfect for high-esthetic areas since they support translucent materials like ceramics. [6]
- Drawbacks:
  - Needs Significant teeth Reduction: More extensive reduction is needed for shoulder finish lines, which may weaken the teeth and cause discomfort after surgery.
  - Risk of Over-contour: If the restoration is not prepared correctly, there is a chance that it will be over-contoured, which could lead to an unsatisfactory fit or aesthetic problems. [3]

Shoulder with Bevel

- Benefits:
  - Improved Marginal Adaptation: The marginal seal is improved by the bevel on the shoulder finish line, which permits greater adaptation, particularly in metal restorations.
  - Less Marginal Discrepancy: For porcelain-fused-to-metal (PFM) restorations, a bevelled shoulder aids in controlling small discrepancies and enhancing marginal fit.
  - Perfect for PFM Crowns: It is appropriate for PFM restorations because it offers enough room for both metal and ceramic layers [4].
- Drawbacks:

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o Unsuitable for Brittle Materials: All-ceramic restorations that are susceptible to chipping or breaking are not intended for this finish line since it may result in unsupported ceramic edges.
o Technique Sensitive: Needs careful planning and finishing because even little adjustments to the bevel angle might affect aesthetics and marginal fit. [1]

Knife Edge Finish Line

- Benefits:

o Minimal Tooth Reduction: By maintaining tooth structure and lowering the possibility of pulpal trauma, this finish line is extremely conservative.
In non-esthetic areas, the smooth margin transition provides a thin, continuous margin that complements full-metal crowns [2].

- Drawbacks:
  - o Poor Marginal Fit for Non-Metal Restorations: Ceramics adaptation is challenging due to the tiny margin, which may result in marginal discrepancies.
  - o Difficult to Detect and Prepare Accurately: The small margin is difficult to see and could result in preparation errors or under-reduction, which could compromise the final fit.
  - o Limited Use: Unsuitable for materials that need thickness, such as ceramics, or for highly aesthetically pleasing areas [4].

Featheredge Finish Line

- Benefits:
  - o Very Conservative: Suitable for full-metal restorations, it permits the greatest amount of tooth structure preservation.
  - o Smooth Finish: Offers a thin, continuous margin that is simple to clean and can lessen bulk at the gingival margin. [3]
- Drawbacks:
  - o Unsuitable for Ceramics: Ceramic materials may fracture or seem less attractive due to feather-edge finish lines' inadequate thickness.
  - o Difficult to Achieve Precise Marginal Fit: The tiny margin makes it challenging to obtain a precise fit, which may result in marginal differences and microleakage.
  - o Restricted to Metal Restorations: Because of the absence of material support, these restorations are not recommended for PFM or all-ceramic crowns [1].

VI. MODIFICATIONS OF FINISH LINES AND THEIR INDICATIONS

Finish line changes are frequently used to improve the lifespan, fit, and aesthetics of restorations, particularly when conventional designs must be modified to satisfy certain clinical requirements. Additionally, these adjustments could address certain patient situations like thin gingival biotypes, aesthetic preferences, or the need for a more conservative approach. The following list of typical finish line changes includes indications and references.

1. Modified Shoulder with Bevel

- To create a more gradual transition from the restoration to the tooth surface, a bevel is added to a typical shoulder finish line.
- Signs:
  - o PFM Restorations: When a stronger metal margin is required for improved adaption, this alteration is perfect for porcelain-fused-to-metal (PFM) crowns.
  - o Situations with Subgingival Margins: The bevel aids in achieving a tight fit, lowering the possibility of microleakage and enhancing the marginal seal when the margin is below the gum line.
  - o Teeth with root canal therapy: Offers a strong border for teeth that are weak, particularly in cases where a conventional shoulder might result in exposed enamel margins. [3]

2. Radial Shoulder

- With a rounded internal angle, the radial shoulder is a modified form of the classic shoulder that more uniformly distributes stresses to avoid fractures.
- Signs:

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- All-Ceramic Crowns: Lower fracture hazards by increasing material thickness while reducing stress on ceramic materials.
- Anterior Restorations: Suggested for aesthetic areas where a combination of strength and translucency is required.
- Cases Needing Uniform Margins: Perfect for circumstances requiring a seamless transition from restoration to natural tooth, this treatment lowers the chance of plaque accumulation and promotes improved gingival health. [1]

3. Deep Chamfer

- A more substantial chamfer finish line that lacks the bulk of a full shoulder while yet offering greater thickness than a typical chamfer.
- Signs:

Zirconia and lithium disilicate restorations that need greater material thickness to prevent chipping or fracture can benefit from high-strength ceramic restorations.

- Conservative Preparations: Applied when more thickness is still needed but a full shoulder would remove too much dental structure.
- Regions with High Masticatory Forces: Perfect for bruxism sufferers or posterior teeth, where thicker material at the periphery might prolong the life of the restoration. [2]

4. Sloped Shoulder

- Rather than having a level horizontal finish, a shoulder margin is produced with a little slope, usually at an angle.
- Signs:
- PFM and Metal Restorations: Beneficial for PFM or metal crowns where minimal tooth reduction is required but a tight fit is crucial.
- Periodontally compromised teeth: These teeth provide for a thicker margin where gingival support is required, while also offering improved occlusal force distribution.
- Situations Needing Aesthetic Metal Margins: Applied when preventing metal exposure is the aesthetic objective in order to improve the merging of metal margins with gingival tissue. [4]

5. Feathered Chamfer

- A thinner-margin chamfer variation that offers a more cautious preparation akin to a feather-edge but with a chamfer profile.
- Signs:
- Full-Metal Crowns: Suitable for posterior metal crowns where aesthetics are not a top concern, or in situations where minimum reduction is essential.
- Patients with Limited Clearance or Thin Enamel: Beneficial when there is not enough room and the tooth cannot be greatly reduced.
- Areas with Minimal Aesthetic Requirement: Mostly utilised in back teeth where aesthetics are less crucial. [1]

6. Beveled Knife-edge

- A slightly bevelled knife-edge margin that improves marginal strength and adaption while offering a narrow margin profile.
- Signs:
- Metal crowns in patients with compromised periodontal health: Offers a conservative preparation choice when a tight, close-fitting margin and little tooth reduction are needed.
- Teeth with Thin Remaining Enamel from Root Treatment: Beneficial for teeth with weak structure when more extensive reductions could jeopardise structural integrity.
- Areas with little Aesthetic Demand: Frequently utilised in posterior restorations when a close margin fit and little reduction are more important than aesthetic requirements. [3]

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VII. FACTORS DECIDING THE PLACEMENT OF EACH FINISH LINE

A number of important elements, such as the restorative material, aesthetic requirements, biological concerns, and patient-specific variables, affect where finish lines are placed. Appropriate placement prolongs the tooth-restoration complex's lifespan and improves the restoration's marginal integrity, fit, and aesthetic results. The main determinants of finish line positioning are listed below:

1. Restorative Material

- **Impact on Positioning**:
  - The thickness requirements and finish line position of various restorative materials are determined by their distinct structural characteristics. For instance, a larger, more supporting margin—typically subgingival—is required for ceramic materials since they are more brittle and need bulk for strength.
  - Crowns made of metal can accommodate a smaller margin, like a knife-edge or chamfer finish, enabling more cautious placement and preparation.
- **Typical Placement Choices**:
  - To achieve aesthetics, all-ceramic crowns might need a shoulder finish line that is sufficiently thick and positioned closer to the gingival margin.
  - To maintain tooth structure, full-metal crowns can have a supragingival or barely subgingival chamfer or knife-edge margin. [6]

2. Esthetic Requirements

- Impact on Positioning:
  - Subgingival finish lines are frequently needed in high-esthetic locations, such the anterior region, to conceal the restoration's boundary and avoid apparent cement lines. In ceramic restorations, when translucency and a natural appearance are preferred, this is especially crucial.
  - Finish lines can frequently be positioned supragingivally in less aesthetically demanding regions, including the posterior region, which makes them simpler to maintain and clean.
- Typical Placement Choices:
  - A subgingival shoulder finish line offers an aesthetic margin for anterior all-ceramic crowns.
  - For simpler access and cleaning, a supragingival chamfer or knife-edge margin may be utilised in posterior teeth where aesthetics are less important. [4]

3. Biological Aspects

- Impact on Positioning:
  - To maintain healthy gingival tissues, the biologic width—which encompasses the junctional epithelium and connective tissue attachment—is crucial. Gingival recession, bone loss, and inflammation can result from a finish line encroaching on this area.
  - To avoid periodontal problems, finish lines should preferably be positioned 0.5 to 1 mm above or slightly below the gingival margin, maintaining biologic breadth.
- Typical Placement Choices:
  - Finish lines in aesthetic zones can be positioned subgingivally, but they must remain 0.5 mm below the free gingival margin in order to respect the biologic width.
  - To prevent irritating the gingiva, supragingival placement may be used in situations of gingival recession or periodontal compromise. [5]

4. Caries and Existing Restorations

- Impact on Positioning:
  - Where a completion line can be set depends on the existence of caries or outdated restorations. To make sure the restoration completely covers and seals the prepared area, finish lines frequently need to be placed apically to existing deterioration or repairs.
- Typical Placement Choices:
  - To guarantee that all carious tissue is eliminated and covered by the restoration in teeth with severe cavities, a subgingival finish line can be required.
  - If there is sufficient healthy tooth structure, a new finish line can frequently be positioned in the same spot for teeth with supragingival restorations already in situ. [1]

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5. Occlusal Considerations
- Impact on Positioning:
  - Because the finish line must maintain the restoration in use without sacrificing tooth integrity, its location is determined by the direction and strength of occlusal stresses.
  - To lower the chance of material chipping or structural failure, finish lines must stay away from regions with high occlusal contact.
- Typical Placement Choices:
  - To avoid wear in situations involving high occlusal forces, including bruxism, finish lines may be positioned a little bit away from high-stress regions.

o To increase thickness and support, deep chamfer or radial shoulder finish lines are frequently positioned in regions with high occlusal stresses. [2]

6. The gingival biotype
- Impact on Positioning:
  - Finish lines should be positioned cautiously to prevent injury to the gingival tissues because thin gingival biotypes are more prone to recession.
  - Subgingival placement may be more widely employed in aesthetic areas and may be better tolerated in people with thick gingival biotypes.
- Typical Placement Choices:

Supragingival or equigingival finish lines are advised for patients with thin biotypes in order to lower the risk of recession and margin exposure.
  - Finish lines for the radial or subgingival shoulders can be employed for thick biotypes with less chance of gingival recession. [7]

7. Ease of Access and Cleanability
- Impact on Positioning:

When feasible, placing a finish line supragingivally to facilitate access for obtaining impressions, placing restorations, and performing future maintenance.
  - Subgingival finish lines can be more difficult to reach and maintain, which raises the possibility of plaque buildup and periodontal problems.
- Typical Placement Choices:
  - For simpler upkeep and cleaning, a supragingival chamfer or knife-edge finish line is frequently chosen in posterior regions where aesthetics are not important.

A smooth shoulder margin makes cleanliness easier in anterior regions that need subgingival insertion. [3]

VIII. DOES FINISH LINE IS REQUIRED FOR IMPLANTS?

Although finish lines are typically necessary for restorative components (such crowns or bridges placed over implants) in implant dentistry, their shape and purpose are different from those of natural tooth preparations. The biomechanical factors in finish line design for implant restorations concentrate on material compatibility, aesthetics, and load distribution rather than periodontal issues because implants do not have the periodontal ligament like natural teeth do. The following list of finish line concerns for implants includes pertinent references. [8]

Difference between conventional finish line and implant finish line

Due to variations in anatomical support, biological reaction, and biomechanical needs, traditional (natural tooth-supported) restorations use different finish lines than implant-supported restorations. The main differences are as follows:

1. Biomechanical Assistance
- Conventional Finish Lines: The periodontal ligament of normal teeth, which distributes and absorbs occlusal stresses, is taken into account when designing finish lines. The purpose of common finish line types, such as chamfer and shoulder, is to support the crown material while maintaining the maximum amount of tooth structure.
- Implant Finish Lines: The finish line must guarantee stability under highly concentrated occlusal stresses because implants are directly anchored into bone and do not have a periodontal ligament. In order to manage the direct transmission of stresses to the bone, implant finish lines are typically more strong and wider [9].

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2. Biological Aspects

- Conventional Finish Lines: To prevent periodontal problems, finish lines for teeth are made with the biologic width in mind. To avoid inflammation and bone resorption, the finish line placement must respect the junctional epithelium and connective tissue attachment.
- Implant Finish Lines: To provide protection, implants rely on a soft tissue seal rather than a true biologic width. Depending on the aesthetic zone and the abutment design, implant finish lines are frequently placed to preserve a secure mucosal margin. [10]

3. Design and Thickness of Margin

- Conventional Finish Lines: Because of the tooth's natural strength and periodontal support, natural tooth restorations can have thinner margins and a range of finish line designs, including a chamfer, deep chamfer, or shoulder. For metal crowns, for instance, a feather-edge or knife-edge finish line may be utilised.
- Implant Finish Lines: Especially for ceramic crowns, implant restorations usually include larger margins (such as deep chamfer or shoulder designs) to support the restoration material and improve load distribution. In order to prevent sharp edges that could cause stress concentrations in the prosthesis, implant completion lines are frequently more rounded. [3]

4. Requirements for Aesthetics

- Traditional Finish Lines: To create a smooth appearance and conceal the margin of ceramic or metal-ceramic crowns, traditional finish lines are frequently positioned subgingivally in aesthetic areas. The natural gingival contour is taken into account while determining the depth of subgingival placement.
- Implant Finish Lines: Different approaches are taken to resolve aesthetic difficulties with implants. In the front zone, subgingival insertion is also an option, although the goal is to create a soft tissue seal rather than mimic the biologic width of natural teeth [11].

5. Accessibility and Cement Control

- traditional Finish Lines: In traditional restorations, margins are made to minimise cement retention and facilitate cleaning by taking accessibility and cement removal into consideration.
- Implant Finish Lines: If cement is not sufficiently removed from cement-retained implant restorations, there is an increased risk of cement-induced peri-implantitis. As a result, implant finish lines are frequently made to be a little easier to reach or to use certain cement control techniques, including a supragingival margin in unsightly places. [8]

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