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Mini Review

Cosmetic and Esthetic Dentistry Revisited

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Abstract

Background: The understanding of principles dictating the realization of Cosmetic (CD) and Esthetic Dentistry (ED)among general dental healthcare workers is scant. Although many confuse the terms and use them interchangeably, the two approaches are not the same, and differences influence the practice of dentistry.

Aim: Appraised here are how these differences between Cosmetic-, and Esthetic-Dentistry impact the practice of dental therapeutic applications, and how and why they affect various disciplines and procedures in dentistry.

Discussion: Noting that Cosmetic-Dentistry is impermanent, realized for immediate visual effect or short-term purposes and is not necessarily an ideal copy of nature, differentiates CD from Esthetic-Dentistry. ED emulates ideal nature and is intended to be durable.

Conclusion: Theatrical dentistry is the pinnacle of CD, whereas advanced principles of Dentistry in prevention, orthodontics, implantology, orthognathic Maxillo-facial and craniofacial surgery is generally deemed esthetic.

***Keywords**: Cosmetic; Esthetic; Dentistry; Theatrical-Dentistry; Implantology; Orthognathic-Surgery; Craniofacial-Surgery; Maxillofacial-Surgery; Orthodontics; Prosthodontics*

Abbreviations

CD: Cosmetic Dentistry; ED: Esthetic Dentistry; TD: Theatrical Dentistry; PD: Preventive Dentistry; MFOS: Maxillofacial Surgery; CFS: Cranio-Facial Surgery; DHW: Dental Health Care Workers; OH: Oral Hygiene

Provenance

Background: For nearly two centuries (19th and 20th Century), the practical restraints from dental materials disallowed both conformative and restorative dentistry to emulate nature in form, function and appearance. Amalgams served to restore prepared cavities by removing decay, and which demanded retention shapes that were limited in size by the physical properties of the amalgam. Both appearance and durability were serious constraints on successful restorative dentistry. The use of metals for inlays, onlays, overlays and crowns were not natural and always unappealing to the eye. The understanding of principles differentiating Cosmetic (CD) from Esthetic Dentistry (ED) among general dental healthcare workers in practice were confused, unresolved and both principles overlapped. Although many used the terms interchangeably, the two approaches are not the same, and differences influence the practice of dentistry.

Aim of the Study

Appraised here are how these differences between Cosmetic-, and Esthetic-Dentistry (CD and ED) principles impact the practice of dental therapeutic applications, and how and why they affect various disciplines and procedures in dentistry.

Discussion

Noting that Cosmetic-Dentistry (CD) is impermanent, realized for immediate visual effect or short-term purposes and is not necessarily an ideal copy of nature, CD differs mainly from Esthetic-Dentistry. ED emulates ideal nature and is intended to be durable [1-6]. These fundamental differentiating principles are listed below:

- **Cosmetic dentistry**
  - Minimal accommodation or tolerance
  - Consciously temporary
  - Not ideally functional
  - No natural emulation
  - No health enhancement
  - Superfluous decoration
  - Compromised form
  - Available technique and material.
- **Esthetic dentistry**
  - Physical accommodation and physiological tolerance
  - Long term durability
  - Optimal/good function
  - Emulates natural state
  - Promotes health
  - No decoration
  - Form ideal
  - Best technique and material.

Principles dictating policies of cosmetic and esthetic dentistry [1]

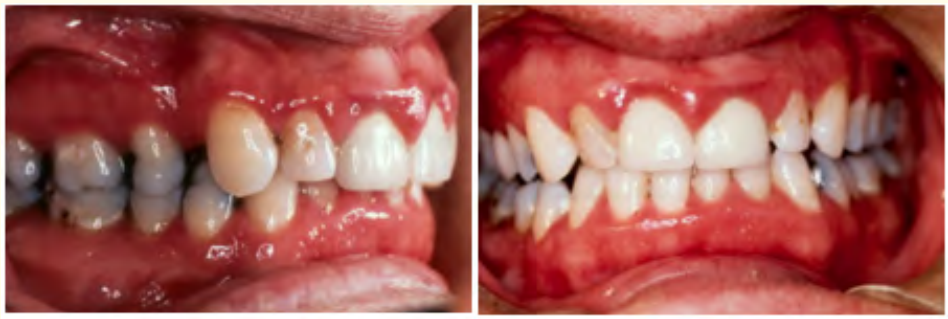


Figure 1A and 1B: *Cosmetic dentistry: The Crowns on #11 and #21 (FDI numerology). Fail on all accounts: they have minimal soft tissue accommodation: they are cconsciously temporary; they are not ideally functional; their form is compromised they fail to emulate perfect nature. There is no health enhancement; at best they are superfluous decoration. The crown preparations impinge onto the supra-bony 'biological width space' with consequent soft tissue reaction [1,6].*

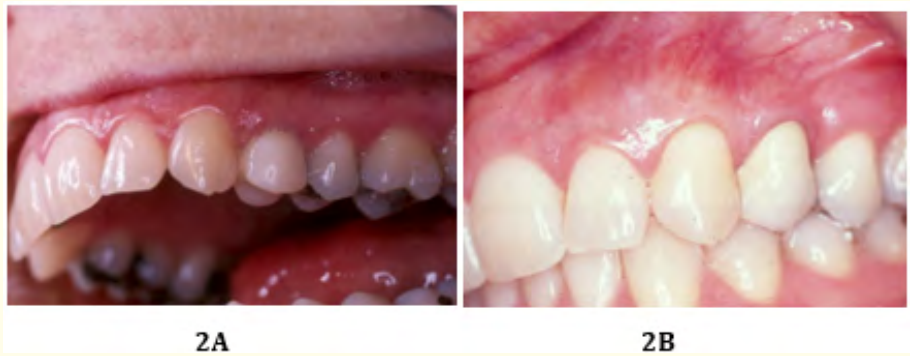
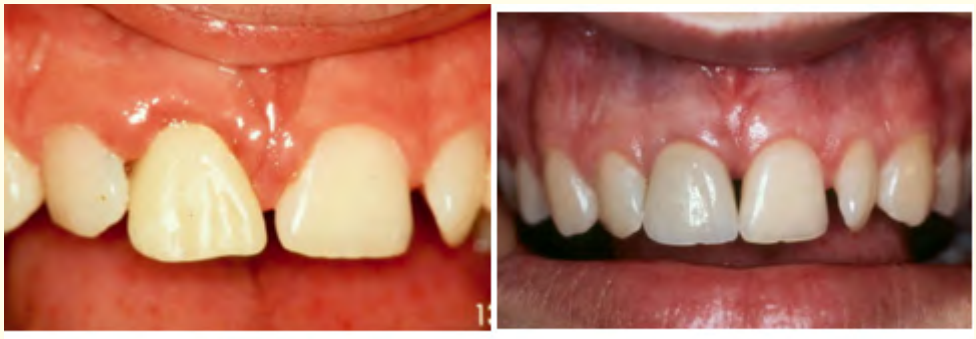
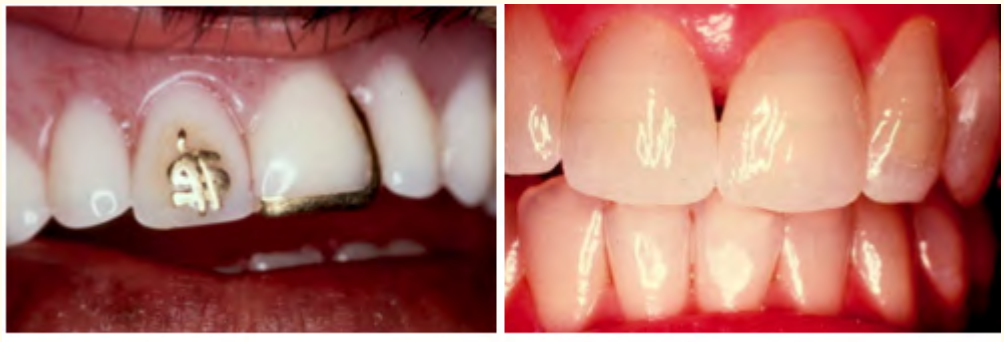


Figure 2A and 2B: *2-A cosmetic crown #-24; esthetic crown #-24. The crown on #-24 (FDI numerology) in figure 2A is temporary, and has a peri-coronal gingival inflammatory hyperplasia. After a periodontal procedure of clinical crown lengthening, the crown on the same tooth #-24 in figure 2B accomplishes all aims of ED. There is perfect restoration of gingival architecture: it is planned to last a life-time; it is in optimal form and function; it emulates nature as closely as possible; there is no superfluous decoration; there is no adverse physical accommodation or soft tissue reaction [1,6].*



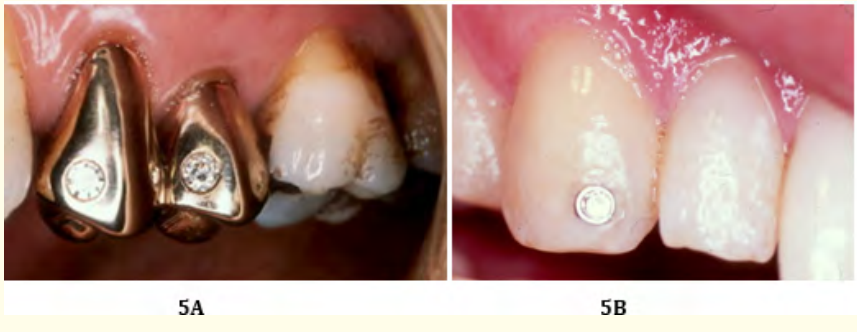
3A 3B

Figure 3A and 3B: *Cosmetic crown on #11, and esthetic crown on #11. (FDI numerology). The crown on #11 (FDI numerology) in figure 3A is temporary, and has a peri-coronal gingival inflammatory hyperplasia. After a periodontal procedure of clinical crown lengthening, the crown on the sametooth #11 in figure 3B accomplishes all aims of ED. There is perfect restoration of gingival architecture: it is planned to last a lifetime; it is in optimal form and function; it emulates nature as closely as possible; there is no superfluous decoration; there is no adverse physical accommodation or soft tissue reaction [1,6].*



4A 4B

Figure 4A and 4B: 4A: *Cosmetic superfluous decoration. The prosthesis #11 has a gold $ sign and #21, has a pseudo-Class-IV Gold inlay. (FDI numerology). 4B: Esthetic crowns on #11 and # 21, both of which emulate pristine nature.*



5A 5B

Figure 5A and 5B: *Cosmetic inlaid dental diamonds on gold crowns teeth #24 and # 25 (FDI numerology). Although these may be durable, both do not emulate pristine nature and are deemed cosmetic dentistry. 5B: Tooth #13 has an inlaid diamond into natural enamel. This does not emulate pristine nature and are deemed Cosmetic dentistry [2,5].*

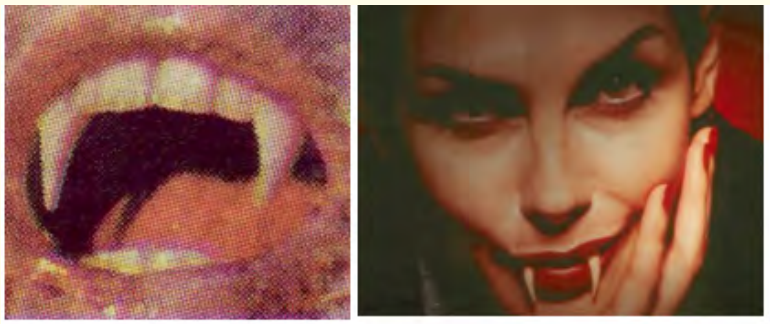
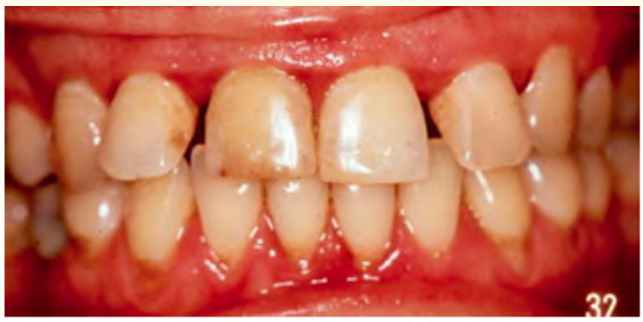


Figure 6A and 6B: *Theatrical dentistry: A modification by addition, subtraction or miscegenation is done for a visual emotional appeal. The upper canines are exaggerated. Theatrical dentistry should always be impermanent, easily applied and reversible and leave no residual damage to tissues [3,9].*

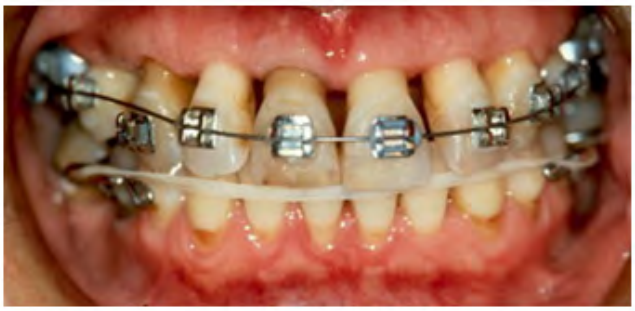
Figure 7A-7C: 7A: *A pristine healthy natural dentition. The ideal, desirable, esthetic dental manifestation. 7B: A dentition treated with cosmetic restorative dentistry. Acrylic faced crowns and conformative restorations are used. Marginal gingivitis is present. With erythema, edema and loss of architecture, and stippling. 7C: A full mouth oral rehabilitation, of the above case in 7B, that emulates nature as much as possible; the restorations are durable, and although not perfect, it is achievable using esthetic principles of dentistry. Note marked improvement of healthy gingivae.*

Combinations of different dental subspecialties are often included to secure excellent esthetic results. Figure 8 and 9 below.



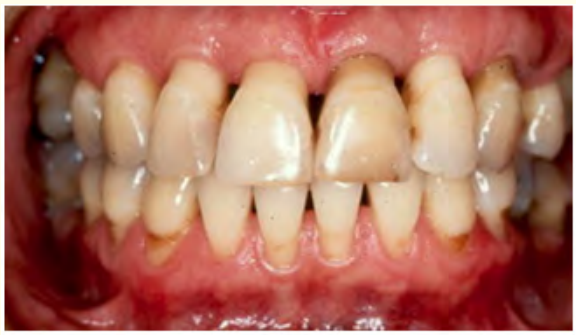
8A

Figure 8A: *A 35 year-old female presenting with moderate periodontitis (pocket depth 5 - 7 mm), bleeding gums and formation of spaces between her teeth.*



8B

Figure 8B: *Same patient as above, after successful muco-gingival periodontal therapy, and during orthodontic treatment.*



8C

Figure 8C: *After periodontics and orthodontics, the soft tissues have healed, pockets have disappeared, and probing of gingival margins are between 0.5 - 1 mm.*

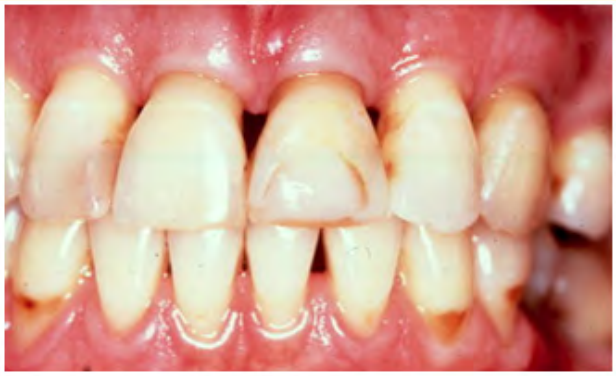


Figure 8D: *After 5 years soft tissue health is restored. The re-aligned teeth remain in position; the gingivae have matured, the teeth are aligned without gaps and are stable.*

As shown above orthodontics and periodontics combined to produce a successful result. Esthetic principles enshrined into periodontic, conservative, restorative dentistry, combined with prosthetic skills and periodontics are embraced into comprehensive treatment plans, to procure optimal esthetic outcomes. A case in point is outlined below (Figure 9A to 9G).

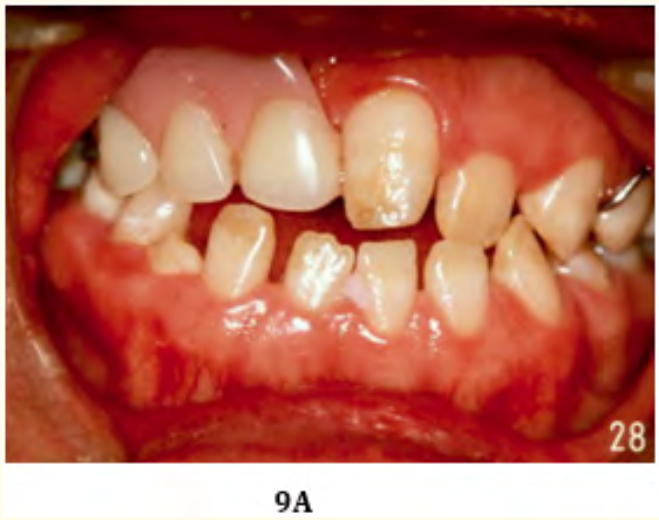
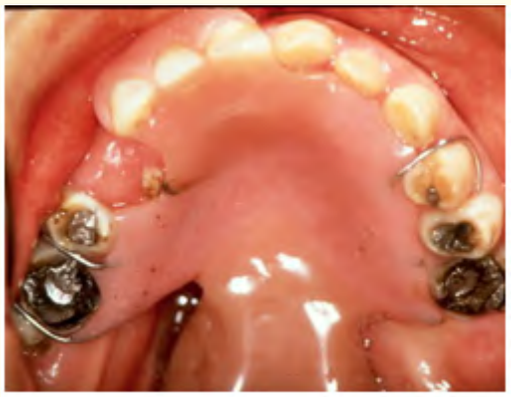
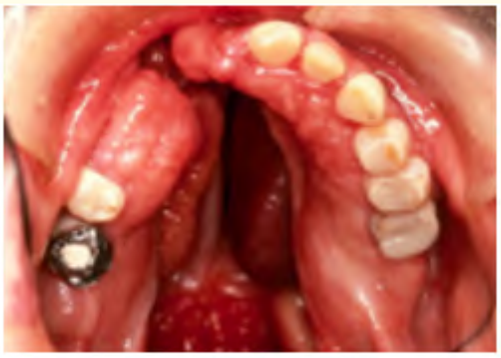


Figure 9A: *Presentation of 25 year-old female with a patent cleft- palate, and removable partial prosthesis and speech bulb. This was considered as an intermediate cosmetic solution.*



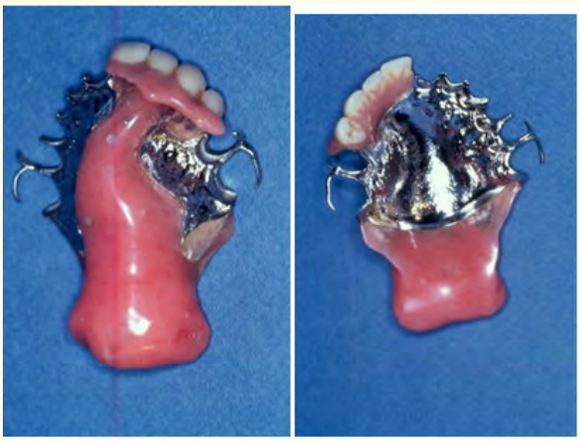
9B

Figure 9B: *The removable partial prosthesis in situ. The remaining supporting teeth required restoration and gingivoplasty to accommodate crowns for an esthetic definitive resolution.*



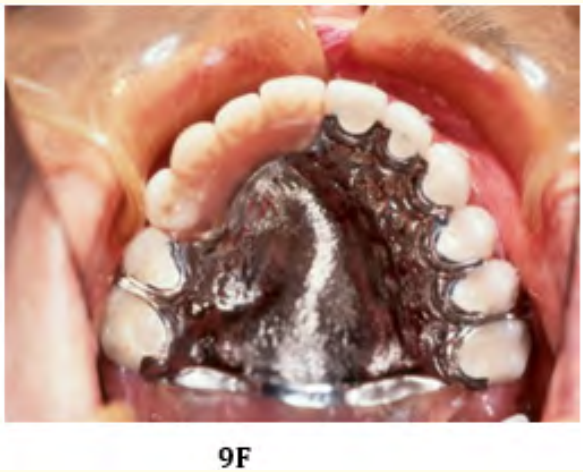
9C

Figure 9C: *Theis shows the cleft palate opening into the nasal fossa. The remaining teeth are being treated conservatively.*



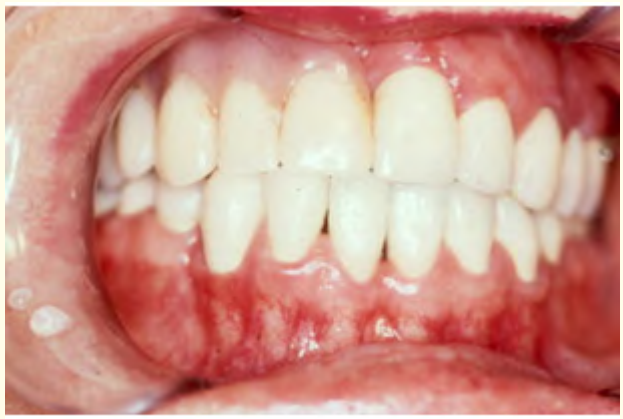
9D 9E

Figure 9D and 9E: *The new removable prosthesis from the superior nasal-view (9-D) and the inferior oral-view (9-E), made with acrylic teeth and a speech bulb, all secured and fixed onto a precision chrome-cobalt scaffold-skeleton.*



9F

Figure 9F: *Intra-oral view of the new removable prosthesis in position. New milled edged crowns, made with metal-fused-to-porcelain, are place on salvaged teeth and provide stable retention for the dental prosthesis, the hard-palate and new speech bulb.*

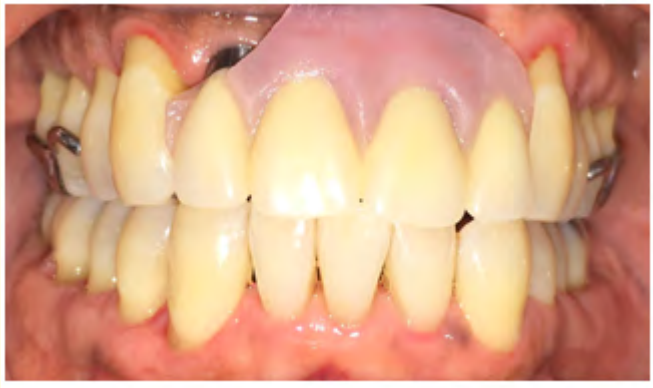


9G

Figure 9G: *The full-frontal view of the final case. After corrective periodontal surgery, metal-fused-to-porcelain crowns were placed on remaining teeth in both jaws, and the new prosthesis placed. This combination of disciplines rendered an optimal esthetic result.*

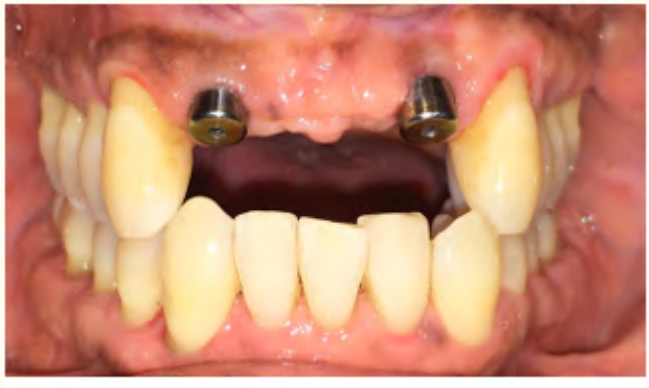
Osseointegrated implants (OI)

The introduction of OI revolutionized permanent individual tooth replacement, as well as providing reliable, durable anchorage for partial or full mouth prostheses (Figure 10A-10C and 11).



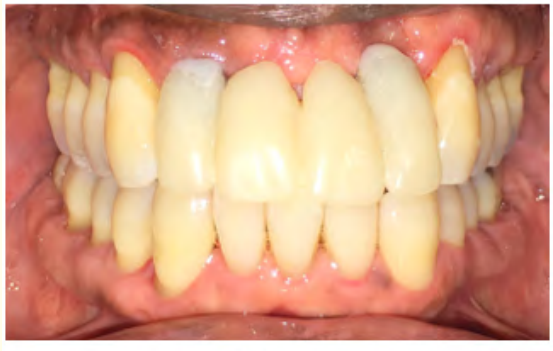
10A

Figure 10A: *Upper premaxilla with #11, #12, and #21, #22 (FDI numerology) replaced with a removable prosthesis.*



10B

Figure 10B: *Upper premaxilla with #11, #12, and #21, #22 (FDI numerology) replaced with successfully osseointegrtaed implants.*



10C

Figure 10C: *Upper premaxilla with #11, #12, and #21, #22 (FDI numerology) replaced with fixed prosthesis, metal fused-to-porcelain. Because this therapy is durable, emulates nature and has optimal function, it is deemed esthetic dentistry [7].*

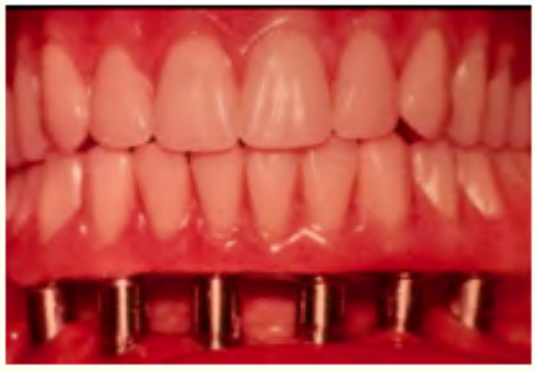


Figure 11: *This shows a full lower arch prosthesis supported by six osseointegrtaed implants. The superstructure can be removed for easy cleaning and the implants are regularly monitored and maintained with prophylactic maintenance.*

Discussion

CD and ED overlap frequently, and both have an influencing role to play in the practice of dentistry. Although orthodontics is commonly used to exploit growth and fixing malocclusions in the hebephrenic years on teenagers, corrective orthodontics is not exclusively used on children, and can be done on adults to assist in procuring a stable healthy dentition. Similarly for ameliorating OI, maxillofacial (MFOS) and periodontal surgery is often called upon to augment alveolar bone to optimize OI success. All restorative dental work demands sustained regular oral hygiene (OH) to eschew any detrimental or degenerative microbial consequences. Neglect of Oral Hygiene will allow stagnation of the oral biome and consequent development of caries on remaining teeth, and also the formation of gingivitis and / or periodontitis, both of which can lead to failure and exodontia. Peri-implant mucositis may lead to infective loss of bone, demanding implant removal, new bone regeneration and implant replacement. There is a common notion among many ignorant patients that think that fixed prostheses do not need maintenance and care. Regular daily home-care oral hygiene, and professional monitoring, prophylaxis and motivation for oral hygiene, are essential for long-term survival of all dentistry.

Concluding Remarks

All dentistry, CD, ED, PD, TD, orthodontics and MFOS demand that Dental Health Care Workers do their part as contributing players of a successful team. When conceiving treatment plans, all Dental Health Care workers (DHCW), must conceptualize therapy in the best interests of the oral health of their patient. Their thinking must make judgment calls to use CD or ED appropriately [8,9]. DHCW's when selecting CD or ED procedures will be constrained, influenced or decided upon by many confounding factors. Financial costs, payment arrangements, number of appointments needed, times for maturation of tissues, expectations of appearance, function, and post-operative care must be explained, quoted and reaffirmed in writing before embarking on any complex treatment [10]. Signed comprehensive treatment plans are strongly advised to avoid misunderstandings, disappointment and possible vindictive, frivolous or unwanted law suits.

Theatrical dentistry (TD) is the pinnacle of CD, whereas application of advanced principles of Dentistry in Dental Practice with prevention, orthodontics, implantology, orthognathic Maxillo-facial and craniofacial surgery is generally deemed esthetic.

Authors' Statement

The author has no conflicts of interest to declare.

Bibliography

1. Touyz LZG., *et al*. "Cosmetic or esthetic dentistry?" *Quintessence International* 30.4 (1999): 227-233.
2. Touyz LZG., *et al*. "Diamonds and cosmetic dentistry". *Restorative and Aesthetic Practice* 6.4 (2004): 10-17.
3. Touyz LZG. "Theatrical dentistry. Principles and practice". *Cosmetology and Oro Facial Surgery* 2 (2016): 106.
4. Touyz LZG. "Cosmetic dentistry: Unnatural coloring of the dentition". *Oral Health and Dentistry* 3.5 (2018): 744-750.
5. Touyz LZG. "Cosmetic dentistry and decorative diamonds in prosthodontics". *ICARE. International Case Reports* 2.3 (2023): 1031.
6. Touyz LZG. "Tissue accommodation matters: in esthetic and cosmetic dentistry". *ICARE. International Case Reports* 2.2 (2023): 1025.
7. Touyz LZG and Nassani LM. "Osseointegrated implants deemed cosmetic or esthetic?" *Scientific Archives of Dental Sciences* 6.2 (2023): 05-07.
8. Touyz LZG. "Cosmetic science applied to dentistry. Chapter in Book". Cosmetic Dental Science. Bentham Publications (2023).
9. Touyz LZG. "Cosmetic-and-theatrical, esthetic-and-preventive dentistry". *Dentistry and Oral Health Care, Biores Scientia* 3.3 (2024): 1-8.
10. Touyz LZG. "The IARTI, PSR and CPITN; The initial assessment and ranking of periodontal treatment index, an improved rapid classifying index of periodontal and perio-restorative cases". *Dental Health: Current Research* 1 (2015): 1.

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