



“AESTHETIC REHABILITATION OF DISCOLOURED NON VITAL ENDODONTICALLY TREATED TOOTH – A CASE REPORT”.

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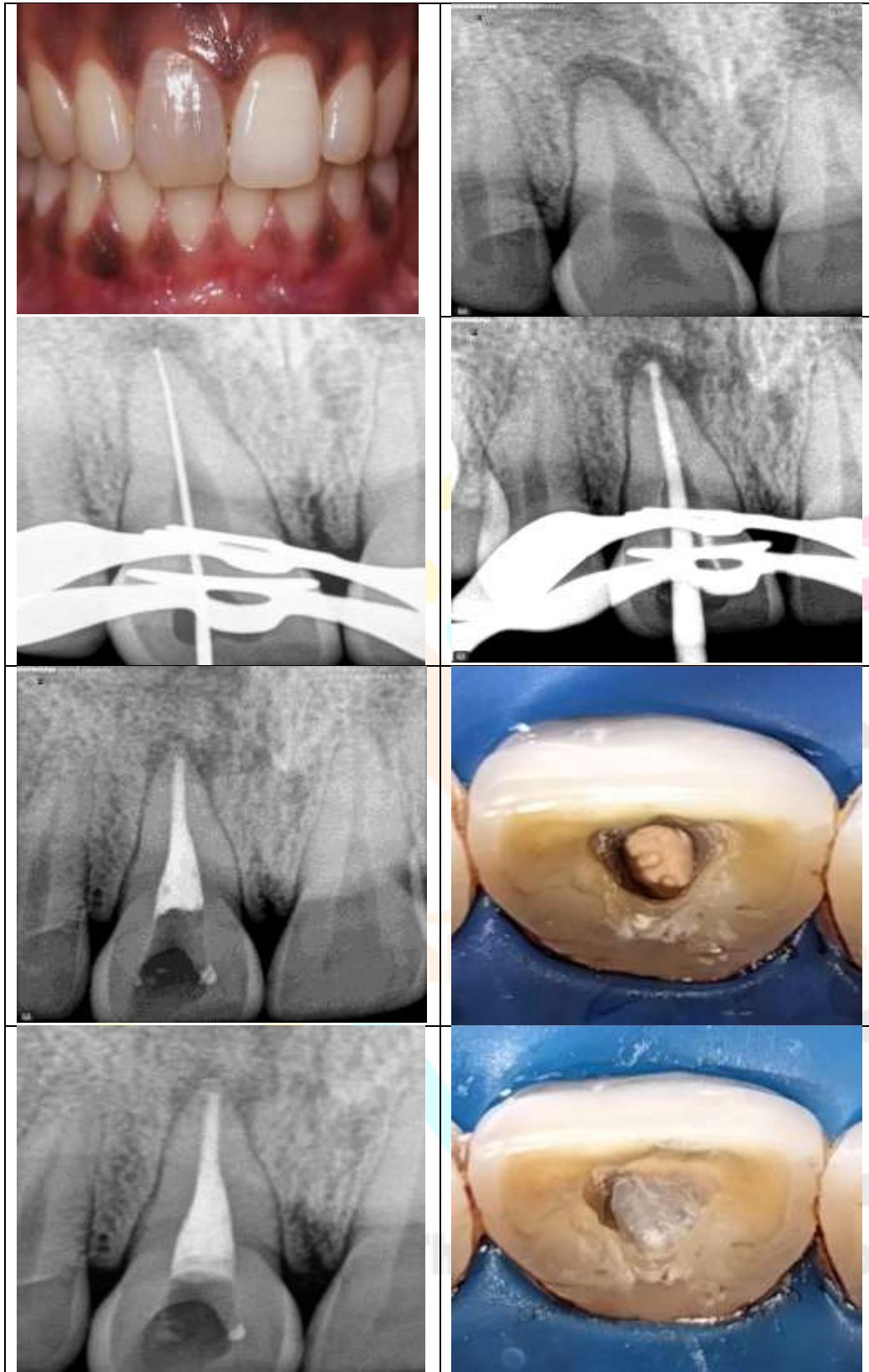
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ABSTRACT : This case report presents a successful non-vital tooth bleaching procedure for a discolored tooth that had undergone root canal treatment. The tooth's discoloration, resulting from the loss of nerve tissue, was effectively addressed through a combination of non-vital bleaching and root canal retreatment. The outcome demonstrated a good prognosis and high-quality aesthetic results, highlighting the potential of this approach for improving the appearance of non-vital teeth.

KEY WORDS : Esthetics, In-office Bleaching, Non-vital Tooth Bleaching, Root Canal Retreatment, Endodontic Treatment.

INTRODUCTION : The demand for cosmetic dental treatments, particularly tooth whitening procedures, has increased among young adults due to growing awareness, social media influence, and advancements in dental care. When addressing tooth discoloration, it's essential to identify the underlying causes, which can vary depending on the type of discoloration. Bleaching is a viable option for improving tooth appearance in cases of mild to moderate discoloration, especially when the tooth structure is intact. This approach offers a minimally invasive and cost-effective solution with quick chairside time.

In the past, full-coverage crowns were often used to restore esthetics in endodontically treated anterior teeth. However, various factors can contribute to tooth discoloration in these teeth, including certain medications, loss of blood supply, residual endodontic materials, and pulp necrosis. Additionally, post-operative changes, such as small fractures or cracks, and consumption of staining substances like coffee, tea, or tobacco can also affect the tooth's appearance.



A.PRE-OPERATIVE CLINICAL PICTURE ,B.PRE-OP RADIOGRAPH, C.WORKING LENGTH, D.MASTER CONE E,F.OBTURATION,G,H.PLACEMENT OF GIC BARRIER.

This case report highlights the effectiveness of non-vital tooth bleaching in conjunction with root canal retreatment and restoration, resulting in a good prognosis and high-quality esthetic outcomes.

CASE REPORT : A 25-year-old female patient presented with a chief complaint of discoloration in her upper right anterior tooth, which had undergone root canal treatment six years prior due to trauma. The intraoral examination revealed a brownish discoloration of the maxillary right central incisor, and an intraoral radiograph showed overextended

obturation with periapical tissue disturbance. To address the discoloration, non-vital bleaching was performed using a mixture of sodium perborate and 3% hydrogen peroxide. After preparing the tooth by removing gutta-percha and placing a glass ionomer cement barrier, the bleaching agent was applied and sealed with temporary restorative.

material. The patient was recalled weekly for repeat applications, with the shade evaluated clinically using a Vita shade guide and photographs. After three visits, significant improvement in shade was observed, and the tooth was permanently restored with composite resin, yielding a satisfactory esthetic outcome.



DISCUSSION

This case report highlights the successful use of non-vital bleaching in a pulpless tooth with intrinsic discoloration. Pulpal necrosis can lead to dentin discoloration, and bleaching with sodium perborate and hydrogen peroxide can effectively address this issue.

Key Takeaways

1. Importance of Radiological Examination: Confirming the absence of ongoing infections and assessing tooth structure integrity are crucial before performing bleaching procedures.
2. Assessment of Tooth Structure: Evaluating existing restorations and detecting any root resorption are essential for determining the suitability of the tooth for bleaching.
3. Effective Bleaching Agents: Sodium perborate and hydrogen peroxide can be used to break down stains and discoloration in non-vital teeth.

The outcome of this case report demonstrates that non-vital bleaching can be a reliable and effective treatment option for improving the esthetic appearance of discolored teeth.

CONCLUSION

Modern cosmetic dentistry offers various treatments for non-vital tooth discoloration, with the "walking bleach" technique being a longstanding and effective method. This approach remains popular due to its efficacy, simplicity, and cost-effectiveness in achieving desired results. It can produce rapid improvements in tooth color and is relatively easy to apply, making it a practical option for both dentists and patients. A thorough dental evaluation is necessary to determine suitability.

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