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Abstract: Establishing contacts and contours in posterior teeth is a clinical challenge. Conventionally amalgam is used as direct posterior restorative material and cast metal is used for indirect restorations. Flip side of these restorative materials is that they no where match the esthetics of natural dentition . In this case report, composite resin is used to restore two adjacent cavities in posterior teeth successfully establishing contacts , contours and esthetics .

Introduction: Aesthetic dentistry continues to evolve through innovations in bonding agents, restorative materials, and conservative preparation techniques. Recent developments in material science technology have considerably improved the physical properties of resin-based composites and expanded their clinical applications. Composite resin offers an esthetic alternative for posterior restorations. In this particular case two techniques were adopted in the fabrication of composite resin in the posterior teeth.

History: A 30 year old female patient reported to the department of conservative dentistry and endodontics with chief complaint of fractured filling and food impaction in left lower back tooth region.After fetching past history , clinical examination of hard and soft tissues was carried out quadrant wise.Thermal and electrical pulp testing was done to check the vitality which showed a positive response. IOPA was taken to ruleout periapical pathology.

Diagnosis: Tooth number 34 and 35 were diagnosed with caries and fractured restoration respectively.

Treatment Plan: Restoration of 34 with direct-indirect composite inlay and 35 with direct composite restoration.

Procedure: Shade selection was done before commencing the treatment.



Caries was excavated in 34,DO inlay cavity was prepared under rubber dam .



Separating medium(Vaseline)was applied to the cavity walls, composite material was closely adapted to the cavity and partially cured.



Following this complete curing was done using Megalex.



The inlay was inspected for marginal fit and luted with resin cement after acid etching the tooth and internal surface of inlay.





Now the fractured restoration in 35 was removed and the cavity was inspected clinically for secondary caries. GIC base was applied. The cavity walls were acid etched and restored with direct composite resin under rubber dam.



Conclusion: Amongst a plethora of restorative materials, Composite Resin has evolved as the material of choice with the increase in demand for esthetics. It has the added advantage of being tooth coloured while standing up to the requirements of posterior restorative material. Resin composite restorations in posterior teeth is now a reality, thanks to improvements in these restorative materials and adhesive techniques.

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