Global Ceram•X Case Contest 2010/11

Introduction to the case
A 58 year old Indian male patient came with complaint of a dislodged restoration and a cracked amalgam at the lower left posterior teeth.

Before

After

Preoperative view of 36 due to amalgam dislodgement and 37 cracked amalgam.

Post-operative view of 36 and 37 after being restored with Ceram X Duo and finished with Enhance followed by PoGo polishing system.

Step 1
Tooth shade was determined before rubber dam isolation to avoid mismatch of the selected tooth shade.Ceram X shade fingers are used in tooth shade selection.Occlusal of natural tooth was used as enamel shade guide while cervical region was used as dentine shade guide.

Step 4
Buccal cavity was restored with Ceram X Duo Composite. Dentine D3 and enamel E3 were used.

Step 2
Multiple rubber dam isolation at 35,36 and 37 to avoid moisture contamination and to have better vision during the procedures.

Step 6
Incremental technique was used to rebuild the tooth to minimize polymerization shrinkage. Light cure device was used to cure the composite.

Step 3
Dentine close to pulp was covered with Dycal Dentine, Dentsply. GIC was used to cover the Dycal Dentine followed by DeTrey Conditioner and Prime & Bond NT application.

Step 5
AutoMatrix Retainerless Matrix System, Dentsply was used. Elastic wedges were placed at the interproximal areas. Contact area was burnished before restoration was done with Ceram X Duo composite.

Step 7
36 and 37 after restoration with Ceram X Duo and finished with Enhance and followed by PoGo polishing system.

Material and method

Composite: Ceram•X Duo was chosen to replace the amalgam restorations due to aesthetic demand and reported high mechanical properties. AutoMatrix was chosen to ease the contouring of the restoration. Dycal Dentine was chosen to maintain pulpal health in deep cavities.

Discussion and conclusion

Dual layer composite technique: Ceram•X Duo gives a close to natural appearance which can fulfill the aesthetic demand of healthcare consumers. The high wear resistance of enamel shade layer and high mechanical properties of the dentine shade promise functional restoration for posterior teeth.