



## All Ceramic Restorations using Lab-based CAD/CAM Technology

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### I. Introduction

The most recent all-ceramic system uses a CAD/CAM technology to fabricate an infrastructure in zirconia that possesses a superior marginal adaptation and resistance to fracture when compared to the other all-ceramic systems available. The CEREC inLab® (Sirona Dental Systems, Bensheim, Germany) is a versatile dental laboratory CAD/CAM system, designed to fabricate multiple types of ceramic and heat-cured composite restorations from millable blocks.

The following cases present the crown fractures on the anterior teeth was treated by all-ceramic crown using Cerec inLab® system.

### II. Case Presentation

< Case I >

1. Age/Sex: 17/M
2. Chief Complaint: #11 crown fracture by falling down
3. Past Dental History: N/S
4. Present Illness: crown and root fracture with pulp exposure on #11, Per(+), Pal(+), Mob(-)
5. Impression: crown and root fracture with pulp exposure on #11
6. Tx Plan: surgical extrusion, endodontic treatment and restoration with fiberpost & all-ceramic crown on #11

< Case II >

1. Age/Sex: 15/M
2. Chief Complaint: #21 crown fracture by falling down
3. Past Dental History: N/S
4. Present Illness: crown fracture on #21, Per(+), Pal(-), Mob(-)
5. Impression: crown fracture on #21
6. Tx Plan: endodontic treatment and restoration with fiberpost & all-ceramic crown on #21

### III. Conclusion

Producing a zirconia infrastructure using CAD/CAM technology highlights a true advancement in the development of all-ceramic restorations.