Title: Repair Protocol of Porcelain Laminate Veneers Through Reattachment of the Fractured Ceramic Piece: A Technical Report

We thank the reviewers for their critical assessment of our work. In the following we address their concerns point by point.

1. **“How is the pattern of fracture. Was it adhesive? Cohesive? The dentin appear or it was just a chipping? We need to know what kind of tissue the piece and the substracte have,”**

In this technical report, repairing protocol of lithium disilicate reinforced ceramic laminate veneer which has cohesive fractured piece is described. The fractured ceramic piece is bonded to lithium disilicate ceramic surface. The dentin doesn’t appear.

1. **Which tooth?**
2. **Which part? Enamel?**

It is not tooth, it is just ceramic surface. We changed the sentence like this: “If there is a sharp pointed places in the fractured area on the ceramic surface”

1. **Where´s the Fig.1?**

We added Fig.1 after “If there is a sharp pointed places in the fractured area on the ceramic surface” sentence in the Technique part.

1. **Clinically, it´s better changing the steps to applying the bonding agent . First, it´s better to prepare the piece and then, the tooth. The bonding agent is light cured and the bonding agent can inadvertently photocured with the ambient light. The piece it´s possible to protect ,after applying the bonding agent, in an ambar box.**

We changed the places of the steps. We put the steps of fractured ceramic piece in front of the steps of ceramic laminate veneer (In the technique 3,4,5).

1. **The procedure of cleaning the excess of cement before cementation of porcelain veneer is not recommended because of the risk of marginal stains.**

We changed the cleaning of excessive cement before finishing cementation. But we didn’t change applying glycerine gel.

1. **Not only this movement.**

We add this sentence “At the end, check the contacts in centric occlusion, lateral and protrusive movements of the mandibula (Fig. 13).” at 16th step. But we don’t have any lateral movement photos

1. **It´s necessary to develop more contents int this part.**

We developed the discussion part.

Laminate veneers are restorations that can be safely used by patients for many years**.** In meta-analysis of Morimoto et al. [3] , cumulative survival rate of feldspathic porcelain laminate veneers is 87% and cumulative survival rate of glass ceramic laminate veneers is 94%, the median of maximum follow-up times are 8 years and 7 years respectively. Although this restorations are successful clinically, some types of failures like debonding, chipping/ fracture, marginal or total discoloration, hypersensitivity, secondary caries, periodontal problems and endodontic problems are observed. It is thought that debonding failures will be more common than the other failures because of non retantive feature of laminate veneers. But chipping and fracture related failures are more common than the others. These situation is confirmed by long term clinical follow-up studies of Gürel et al.(debonding rate: 2%, chipping/fracture rate: 3%) [12] , Beier et al. (debonding rate: 1%, chipping/fracture rate: 5%) [13] , Freadeni et al. (debonding rate: 2%, chipping/fracture rate: 3%) [14] , Gresnigt et al. (debonding rate: 1%, chipping/fracture rate: 4%) [15] , Smales et al. (debonding rate: 2%, chipping/fracture rate: 5%) [16] and Rinke et al. (debonding rate: 2%, chipping/fracture rate: 3%) [17] .

The procedures that can be performed in case of clinical failures were defined by Setcos et al.[18] under four different headings and then these definitions were redefined by FDI criteria [19] . These are no treatment (monitoring), refurbishment, repair and replacement. Also treatment recommendations for chipped ceramic restorations are published by Heintze and Rousson [20] . Small chippings are grade 1 and can be trated with polishing. Moderate chippings are grade 2 and can be repaired with composite resin. Severe chippings are grade 3 and treatment option is replacement of entire restoration.

Repairing or replacing are choice for clinicians in small chipping/fracture failures of laminate veneers. The complete replacement of a restoration is both time consuming and expensive. Also tooth structure could be damaged during replacement or additional preperation. Unacceptable restorations can be replacing, but recently repairing has also been recommended as a current treatment option [21, 22] .

In the previous technique, fractured parts were repaired with composite restorations [22] . Discoloration and compatibility with porcelain surface are disadvantages of repairing with composite. The advantage of this technique is the repair of a lamina veneer with own piece. It seems extremely one-piece, because it is cemented with its own part (Fig. 14-18)

In present case, which was repaired with its own part, no failure was observed during 3 year clinical follow-up.

1. **Which authors?**

We added reference for this sentence.

“Unacceptable restorations can be replacing, but recently repairing has also been recommended as a current treatment option [21, 22] .”

[21] Hickel R, Brushaver K, Ilie N. Repair of restorations--criteria for decision making and clinical recommendations. Dental materials : official publication of the Academy of Dental Materials. 2013;29(1):28-50.

[22] Loomans B, Özcan M. Intraoral repair of direct and indirect restorations: procedures and guidelines. Operative dentistry. 2016;41(S7):S68-S78.

1. **The legends are located under the figures**

We changed the places of the legends for each figure.

1. **It´s necessary to attach this figure to the text.**

We added Fig.1 after “If there is a sharp pointed places in the fractured area on the ceramic surface” sentence.

**Also you mentioned about these topics:**

**The authors should provide pics showing the anterior and lateral guide of the mandibular movements. How these movements could interfere in the longevity of this repair.**

We have only anterior guidance photo. We added this photo as Fig. 13. There is not any lateral guidance photos. The patient moved to abroad. So we couldn’t take new photos.

**Also, it needs to show the same pics after the repair procedure.**

We added detailed photos after repair procedure. (From Fig. 14 to Fig. 18)

**How long the restoration was observed (controlled).**

This restoration was observed during 3 years. We added this sentence to discussion part: “In present case, which was repaired with its own part, no failure was observed during 3 years clinical follow-up.”

**The discussion topic needs improvements.**

We improved and expanded.

We also changed some wrong words in the abstract part and we made all the corrections in the text highlighted in yellow.

This technical report title was “Repair Protocol of Porcelain Laminate Veneers Through Reatachment of the Fractured Ceramic Piece: A Technical Report.” But we changed this as: “Repair Protocol of Ceramic Laminate Veneers Through Reatachment of the Fractured

Ceramic Piece: A Technical Report”. We also made highlighted in yellow in the text.