



Your dentist has recommended Cerec treatment for your tooth and has considered many factors with a view to providing the optimum clinical care for you and will be happy to discuss these with you. The following notes are to help patient's understand the rationale for this treatment.

### **Clinical Indications**

Generally for a back tooth, which is a premolar or a molar, if the filling extends to more than one third of the width of the tooth then the structure of the tooth is significantly weakened. Studies show in the case of these large fillings that after ten to fifteen years more than eighty percent of teeth filled with conventional amalgam fillings develop problems associated with fractures in the remaining tooth structure. Cerec restorations aim to reduce this problem by bonding the restoration to the tooth structure, thereby strengthening the tooth.

### **Tooth Preparation**

Cerecs often require minimum tooth preparation as the restoration is held in place by a bonding agent and so does not require the removal of additional tooth structure to achieve retention of a filling as would be the case with conventional restorative techniques. Cerecs often result in a less traumatic procedure for the tooth and the patient. More tooth structure is preserved with Cerec than when providing a conventional crown.

### **Possible Alternatives**

Depending on the size of the filling required a metal amalgam filling can be an alternative. If the filling is a small proportion of the tooth then a tooth coloured composite filling may be possible. In the situation where the cavity is large the tooth may need a core filling initially to build up the tooth followed by overall reduction of the shape of the tooth to allow a crown to be made.

### **Cosmetic Outcome**

Cerec restorations are milled from feldspathic porcelain, which is a highly aesthetic material as its physical properties are closely matched to tooth structure and results in a pleasing natural appearance within the tooth. The ceramic is stain resistant and maintains a good appearance in the longer term.

### **Longevity**

Studies show that Cerec treatments carried out in private clinics have a survival rate of over ninety percent after nine years, which is significantly better than alternative treatments. Cerec techniques preserve the maximum amount of sound tooth structure this means that in the event of failure of a Cerec restoration then other more extensive such as a crown treatment can still potentially be carried out on that tooth.

### **Convenience and Ease of Treatment for the Patient**

In general with Cerec a tooth can be prepared and the restoration milled, finalised and fitted in one appointment. This means that only one local anaesthetic has to be given and that the treatment is started and completed in a single appointment. The alternative of a crown or inlay made by a dental laboratory requires a temporary restoration to be made as the definitive restoration needs to be fitted two weeks later at a second appointment.

The optical three dimensional scanning technique used for Cerec avoids the need for dental impressions of the teeth, which are required by conventional treatments.

Overall patients seem to prefer the ease of Cerec treatment over other treatment alternatives.



### Complications

Complications are rare, but can occur. Most commonly if the restoration is proud then this can interfere with the biting position and may cause the tooth to become uncomfortable to bite on or more sensitive to hot and cold. This is straightforward for the dentist to adjust when the effects of the local anaesthetic have worn off and patient is able to feel when their bite is normal.

Sensitivity to hot and cold can be a problem if the cavity was very deep and close to the pulp, which is the nerve and blood supply inside the tooth, however this usually settles after a couple of weeks. Very occasionally it lasts longer and following all restorative procedures there is a small risk that the pulp is affected which can lead to toothache requiring root canal treatment. Fortunately this is rare.

The Cerec technique sometimes requires making slight changes to the contour of the gum around the tooth either by soft tissue laser or electrosurgery. This procedure allows more tooth structure to be exposed when this is deemed to be necessary for the optimum success of the restoration. When this additional treatment is carried out the gum can feel sore for the following twenty four to forty eight hours, but then returns to healthy gum tissue after this.

The Cerec material is very durable, but occasionally the ceramic can chip and this is usually rectified by the dentist polishing any rough edge on the restoration.

Cerec restorations very rarely come out, however if the bond between the Cerec and the tooth fails then the dentist can usually refit the restoration to your tooth.

### Homecare

A restored tooth, just as with a natural tooth, requires good homecare in terms of removal of dental plaque in order to avoid further tooth decay and maintain a healthy gum condition around the teeth. Therefore a Cerec requires no more maintenance than a normal tooth.

The Cerec restoration is designed for eating a normal range of foods. However crunching exceptionally hard foods, such as boiled sweets, can cause a natural tooth or dental restoration to fracture so it is wise to avoid biting down on anything that is exceptionally hard.

Frequency of sugar intake is the most significant factor for causing tooth decay so avoiding sweet foods and drinks between meals is important for dental health.

Fizzy drinks are significant in causing tooth decay and can be very damaging, so are best avoided. As a simple rule a maximum of three fizzy drinks in a week seems to not cause a significant dental problem.

### Biological Considerations

Cerec is well tolerated by gum tissues and the absence of metal eliminates any concerns associated with the potential toxicity of metal amalgam fillings or reactions to metal involved in the structure of some crowns.

The wear of Cerec porcelain is equal to that of natural teeth so different wear patterns between the tooth structure and the restoration is not an issue. This makes Cerec an ideal material for providing long term restorations for teeth.

### Restoration of the Tooth Form

The Cerec technique greatly aids your dentist in providing a restoration of the ideal shape and form for the tooth. Computer generated design models allow every aspect of your restorations to be designed to the optimum shape. The creation of close contact points with the adjacent teeth is a particular advantage of Cerec and using this technique prevents problems associated with discomfort associated with food packing between teeth.

### Cost Benefit

Overall the Cerec restorations, when used in suitable cases, provide maximum longevity of the tooth and provide an aesthetic outcome. Cerec is a more conservative option and lower cost treatment than a crown. Therefore Cerec has a cost benefit over a crown and a quality and longevity benefit over fillings.