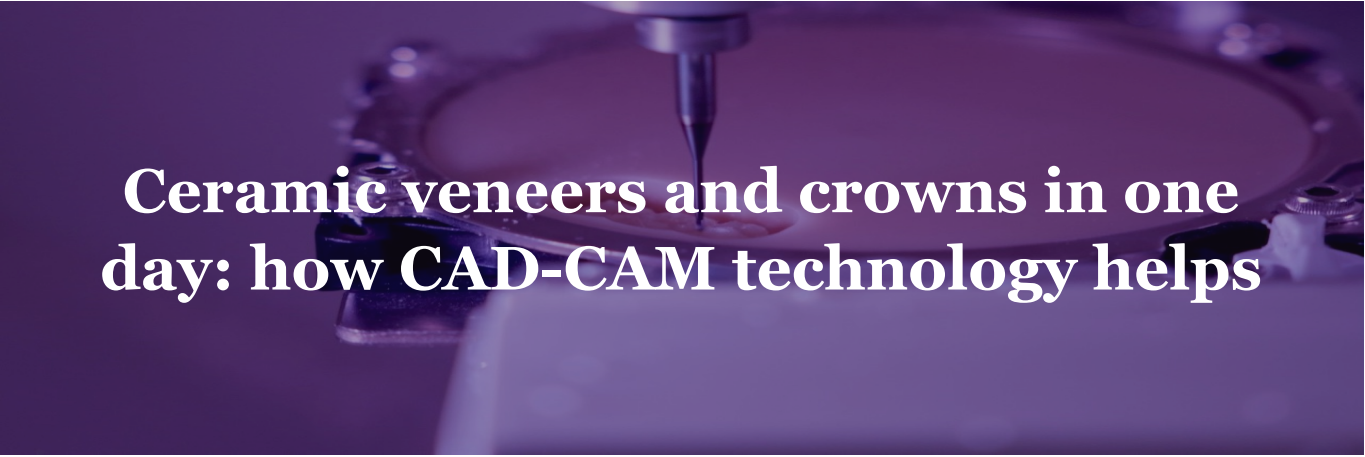




Ceramic veneers and crowns in one day: how CAD-CAM technology helps

“Can my tooth restoration be completed on the same day?”

Digital CAD-CAM technology makes this possible. At our dental practice, we use this process to create ceramic veneers and crowns, with the possibility of same-day completion following the necessary clinical assessment. [1]

Veneers and crowns: what is the difference?

A ceramic veneer mainly covers the front surface of a tooth. It can be used to change its shape or colour. [2]

A crown covers the tooth all around and may be chosen when more extensive restoration or protection is needed. The choice depends on the condition of the tooth and the patient's needs. [3]

What does CAD-CAM mean?

The initials stand for computer-aided design and computer-aided manufacturing, linking digital records of the teeth to the design and manufacture of the restoration. [1]

The main stages of a same-day restoration are:

1. Examination and planning: assessing whether this approach is suitable.
2. Preparation and digital scanning: recording the prepared tooth and the teeth in the opposing jaw.
3. Digital design and manufacture: designing and producing the ceramic restoration.
4. Try-in and placement: checking the fit, contacts with neighbouring teeth and the bite before final bonding.

The ability to manufacture and place a crown in one day using CAD-CAM is documented in the scientific literature. [1]

What changes for the patient?

When the restoration is completed on the same day, multiple appointments and the need for a temporary restoration while waiting for the final one are reduced. [1]

Is it suitable for everyone?

This depends on the condition of the tooth, the extent of the restoration and the overall treatment plan. If other treatment is needed first, additional stages may be required.

The ceramic materials we use are lithium disilicate (LiSi) and monolithic zirconia. The appropriate material is selected according to the indications and requirements of each case. [3–5]

Selected scientific references

1. Sannino G, Germano F, Arcuri L, Bigelli E, Arcuri C, Barlattani A. CEREC CAD/CAM Chairside System. Oral Implantol (Rome). 2015;7(3):57–70. [Source](#)
2. AlJazairy YH. Survival Rates for Porcelain Laminate Veneers: A Systematic Review. Eur J Dent. 2021;15(2):360–368. doi:10.1055/s-0040-1715914. [Source](#)
3. Benli M, Turkyilmaz I, Martinez JL, Schwartz S. Clinical performance of lithium disilicate and zirconia CAD/CAM crowns using digital impressions: A systematic review. Prim Dent J. 2022;11(4):71–76. doi:10.1177/20501684221132941. [Source](#)
4. Aziz A, El-Mowafy O, Paredes S. Clinical outcomes of lithium disilicate glass-ceramic crowns fabricated with CAD/CAM technology: A systematic review. Dent Med Probl. 2020;57(2):197–206. doi:10.17219/dmp/115522. [Source](#)
5. Leitão CIMB, Fernandes GVO, Azevedo LPP, Araújo FM, Donato H, Correia ARM. Clinical performance of monolithic CAD/CAM tooth-supported zirconia restorations: systematic review and meta-analysis. J Prosthodont Res. 2022;66(3):374–384. doi:10.2186/jpr.JPR_D_21_00081. [Source](#)