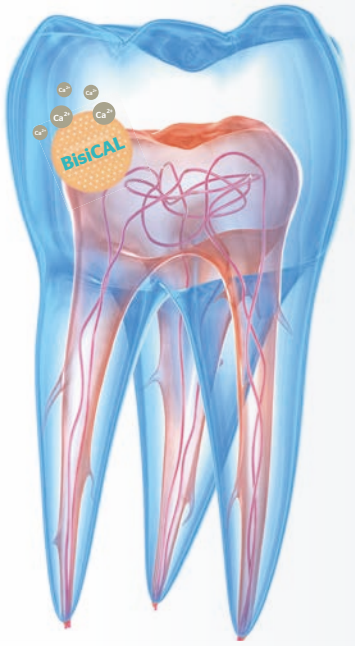


BisiCAL

The calcium plaster for the pulp

The following is a report on a clinical trial of a vitality-preserving treatment option using the product BisiCAL, a bioactive, light-curing, resin-modified calcium silicate for pulp capping with MTA fillers.

Text dentist Romy Dech
Picture dentist Romy Dech, bisico GmbH & Co. KG

Initial situation

A 39-year-old female patient presented at our practice for conservative treatment, with some insufficient fillings due to secondary caries. The X-ray shows the fillings as being close to the nerve. In this respect the treatment plan included indirect or direct pulp capping. In this case, the new pulp capping material BisiCAL from the company bisico GmbH was able to be used.

Treatment

We removed the insufficient filling as well as the caries on tooth 15. After the removal of the caries profunda and preparation of the cavity with relative drainage, the cavity was dried with air and Bisi CAL was used for indirect pulp capping.

The material is very easy to apply thanks to it being a single-component material. Mixing is no longer necessary. The dentist therefore saves time in the treatment process. In addition, consistency is always ensured which means that precise work is guaranteed within the framework of quality assurance.

The syringe attachment makes applying the material light and practicable. However, the opening is still a little too big for my liking. This could be smaller to allow for even more precise work. In contrast to traditional materials, BisiCAL can be modelled well and provides good stability. The material could also be modelled well with the caries probe, without sticking to the instrument.

After the BisiCAL layer had been positioned and checked, it was then light-cured with the polymerisation lamp for 40 sec. In my opinion, this light curing is one of the major benefits of indirect or direct pulp capping with the BisiCAL. It prevents the applied material from slipping and enables further direct work to be carried out.

After light curing, the cavity was etched with phosphoric acid according to the treatment protocol. This was followed by further pretreatment of the cavity with the bonding agent E-Bond LC and subsequent 20 sec. light polymerisation with the Bluephase PowerCure (Ivoclar Vivadent). We then applied the filling material Kalore A1 in individual layers and carried out the appropriate intermediate curing via light polymerisation. The filling was then finished with diamond and carbide burs, a Sof-LexTM disc and polished with a plastic polisher.

Situation before

Cavity drilling

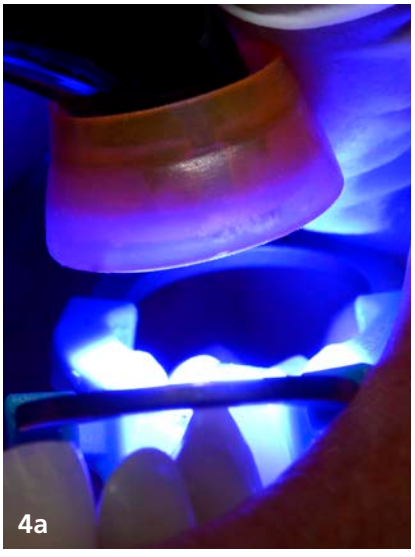
Cavity drilling

application of BisiCal

application of BisiCal

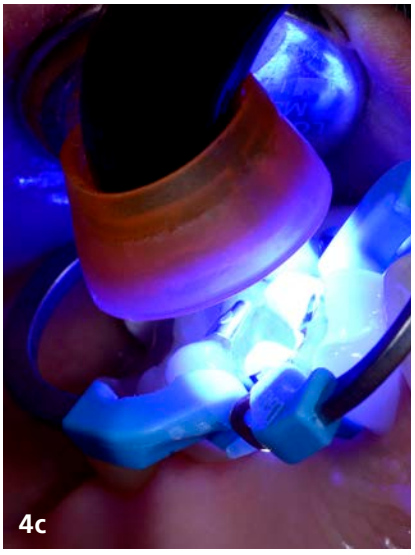
application of BisiCal

application of BisiCal



Curing of the material

Curing of the material



Curing of the material

Etching of the cavity

Bonding the cavity

Light curing of the bonding

Plastic layering

Final situation

Conclusion

BisiCAL can be easily integrated into the workflow of conservative treatment and makes the work involved in indirect and direct pulp capping much easier due to its good handling, application and light curing properties. My team and I were impressed with the product during the test and we will integrate it into our daily practice.

Romy Dech

dentist

–

Die Oldenburger Zahnärzte

An der Südbäke 1 · 26127 Oldenbirg Tel.:

+49 441 630 53

E-Mail: info@praxis-buergerfelde.de www.

die-oldenburger-zahnaerzte.de