

Faster and safer with new temporary cements

The new temporary cements such as tempolink® *single* and *multi* and also tempolink® *clear* considerably simplify and speed up the fitting and removal of resin temporaries and temporarily cemented crowns. They also have substantial qualitative advantages compared to conventional zinc oxide-eugenol cements and meet the most important demands in an ideal fashion².

The first time it is used, the ease of handling the double syringe with mixing cannula comes as a surprise. The polycarboxylate-based material can be injected directly into the crowns without elaborate mixing on a separate mixing block. The two components can be squeezed easily through the mini mixing cannula with little force. The material can be applied quickly with the cannula tip evenly over the insi-



Easy application of the cement layer without mixing

de of the crown and at the same time be spread thinly. This is done so quickly, without having to stop and pick up fresh material from the mixing block, that the dentist or dental nurse can work stress-free without extra assistance even in patients with a lot of saliva. tempolink® comes in two polycarboxylate versions – “single” as a fast-setting component and “multi” as a more slowly setting component for more complex restorations. The high viscosity of the material ensures that the temporary crowns can be pushed smoothly



No inflammation after 3 months with tempolink® multi

into their final position. Even if some residual moisture has been overlooked, there is no significant risk of premature hardening of the material, in contrast to zinc oxide-eugenol

cements, though this does worsen setting of the material so that loosening can occur. Adequate relative drying is therefore advised. On setting, the polycarboxylate cements form a salt with a solubility classified at about the level of zinc phosphate cement³. Depending on the powder/liquid ratio, polycarboxylate cements are more bacteria-proof and firmer than zinc phosphate cement so they are superior to all previous temporary cements in these properties. Thus, the great disadvantage of the high solubility of previous zinc oxide-eugenol cements² is no longer present in tempolink® single and multi. In my observation period, the material is also suitable for longer-term, semi-permanent fitting of crowns and especially bridges, when adequate mechanical retention is present.



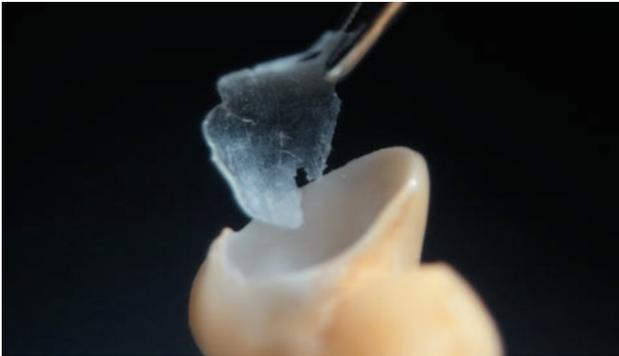
The particularly thin film of the polycarboxylate cement can be seen clearly

The good pulp tolerability of polycarboxylate cement is well-known and I have now used it at least fifty times without producing patient symptoms. The picture opposite shows ground tooth stumps after removal of a long-term temporary cemented with tempolink® multi nE where the gingiva is completely uninfamed and the odour familiar with ZnO-eugenol cements did not occur.

With regard to adhesion to dentin/metal frameworks and zirconium dioxide frameworks, I can only report that it is fully adequate. There was premature loosening only in two cases on highly polished titanium. My colleagues found it particularly pleasant that this cement can be removed so quickly and easily. The patient can be spared prolonged scraping with a probe without anaesthesia prior to a try-in as tempolink® can be wiped away with a moist cotton wool pellet in most cases.

tempolink® clear is a dual-hardening methylmethacrylate and is fully transparent so it is suitable for fitting all crowns made of relatively translucent material for an aesthetic trial. Even if high strength is planned for semi-permanent fitting of metal restorations, this temporary fixing composite appears to be a suitable material. In the case of tooth

stumps built up with composite, caution is required so that a permanent bond does not occur because these materials are related'. This can be prevented by isolating the affected areas with glycerine or Vaseline. It is good that the two materials have no effect on the setting reaction of adhesive



Residue-free removal of tempolink® clear from the tooth stump or crown as a complete film

composites to the definitive fixing. The residue-free removal of tempolink® clear from the tooth stump or crown as a complete film ensures that no problems will occur with subsequent adhesive fitting. In my experience, this group of

new temporary cements is highly suitable for securing all dental crown and bridge restorations. The different versions of DETAX tempolink® can cover nearly all the possible indications and have obvious advantages for dentist and patient as described above.



A temporary all-ceramic crown fitted with tempolink® clear

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Bibliography

1. Dörfer C, Seidel J, Staehle H J: Befestigungskunststoffe in Meiners H, Lehmann K M Klinische Materialkunde für Zahnärzte
2. Mayer T, Pioch Th, Staehle H J: Provisorische Befestigungsmaterialien In „Klinische Materialkunde für Zahnärzte“, München 1998: 65-69
3. O'Brien W, Ryge G; in „An Outline of Dental Materials and their Selection“, Chapter Dental Cements, W.B: Saunders Company, Philadelphia 1078: 164-165
4. Völkel T: Even temporary smiles can be beautiful. Wissenschaftl. Mitteilung Vivadent AG, 2005, 1
5. Völkel T: System cem . Wissenschaftl. Mitteilung Vivadent AG, 2005, 10

Further references with the author



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