



glassbite

Report on experience with glassbite
Dr. Gerhard Hetz, Markus Spörl
Dentists, Munich
DETAX@PresseService

What you can see better fits better ...

For making a tooth replacement, the dental technician requires impressions of both jaws, together with documentation of the correct bite and sometimes measurements of temporomandibular joint movement and also details of the colour of natural teeth or any restorations in the vicinity of the planned treatment. A frequently underestimated measure is correct bite registration (following the impression).

Preparation may have been perfect and crowned by an optimal impression of the preparation and the opposing jaw, but if the jaws are not correctly aligned, the technician has no chance of making a denture with correctly fitting occlusion and the dentist has only himself to blame if he has to keep grinding them in. Apart from the annoying waste of time, the



Fig. 1: Preparation of case 1

carefully constructed occlusal structures are destroyed by grinding so that the replacement no longer complies with gnathological principles. Polishing is also required.

So it is worth thinking about bite registration.

During bite registration, care should be taken to assist the patient in finding the closed bite position – “passive” bite registration is better than “active”. When a patient is told by the dentist to “bite”, the position adopted is usually not that of maximum intercuspidation but that of “biting off”. To make things more difficult, the patient is normally anaesthetised and then uses excessive force, which leads easily in the case of preparation in the distal region to temporomandibular joint compression and thus incorrect interpretation of the closed bite position – the denture is then too low and the joint compression is firmly built in via the tooth replacement. Provided the canine teeth are still present unground, it is relatively easy to check that the bite is correct – the canines



Fig. 2: The bite registration material is introduced between the dental arches with the special cannula

have contact and so the technician can build up a canine guide in the articulator, which will very probably correspond to reality. However, a problem with the usual opaque bite registration materials is that you cannot see what the patient is doing during the setting phase – the obtained position can easily shift again. In the laboratory, the technician decides on



Fig. 3: Bite registration of case 2 in the articulator

the bite registrations and then notices that something has gone wrong – the patient has to come back for repeat bite registration, which is annoying and unnecessary.

Use of glassbite in practice

(Fig. 1). We have tried out the registration material "glassbite" from Detax in our practice. What struck us positively at once was that there is an intelligent application tip, which is not pointed, as usual, but is flat and broad at the end (Fig. 2). With this, the registration material can be applied ideally between the dental arches or between teeth and preparation much faster and more easily than is the case with other materials. The user-friendly registration material is used in the Automix so that a thoroughly positive assessment can be given as regards the point of "applicability". The stability of the thixotropic material is also very good, nothing drips down where it is not wanted, which makes it more pleasant for the patient.



Fig. 4: Case 2, closed bite position with glassbite bite material in situ

The transparency proved to be particularly positive – the material really is completely transparent. Thus, even when it was in the patient's mouth, it was always possible to assess whether the closed bite position was maintained. And the technician found the registration so good that he no longer had to do much with it – he could see how the models fitted together (Fig. 3). Normally, he would have had to cut the regi-

strations down to the middle of the tooth to assess what he could see clearly with glassbite without doing anything else. Our technician complained about only one point: when he wanted to trim the registration with a bur, he could not do so as he does with the usual material as he found that glassbite "crumbled" somewhat. The registration should therefore be cut with a scalpel and not with a bur, which is better anyway. Burs leave behind burrs and these falsify the result



Fig. 5: Bite registration of case 2, untrimmed

(Fig. 4 + 5).

The short reaction time was also positive – it has to remain in the mouth for only 60 seconds, which is pleasant for the patient and saves time for the practice. We found the consistency of the material just right: sufficiently liquid to flow wherever it is needed and enormously stable – nothing flows away, not even with large amounts. The final hardness is Shore A 80, which is good and strong and ensures exact transfer of the bite to the laboratory.

In short: the material was completely convincing when tested in practice.

Dr. Gerhard Hetz
Markus Spörl
Dentists, Munich



DETAX

GmbH & Co. KG
Carl-Zeiss-Str. 4 · 76275 Ettlingen/Germany
Telefon 07243/510-0 · Fax 07243/510-100
www.detax.de · post@detax.de