

CASE REPORT
TrioClear™ and F.I.T.: COMBI Treatment
Align & Restore

Dentist: **Taco Kwee**

PART 1: ALIGN

As a restorative dentist I am often confronted with complex treatment planning decisions resulting from the following:

- Unesthetic position of the anterior dentition caused by crowding, TSD etc.
- Poor position of posterior abutments due to malocclusion
- Supra eruption and occlusal plane discrepancies.
- Mesial drift into edentulous areas.
- Collapse of the occlusal vertical dimension due to loss of posterior teeth.

In this case the main complaint was overall tooth wear and sensitivity due to malposition (Overjet and Class II) There was a group function due to this wear.

Previously, the solution for improving the position, alignment and shape of the teeth without traditional orthodontic treatment has been the application of veneers or crowns, both of which can damage tooth enamel and integrity, and have a limited lifespan. Now Aligner therapy is providing us the opportunity to align teeth and improve the occlusion before restoring them with TrioClear™ we aligned the elements to restore the occlusion in cooperation with F.I.T. Forma® Injection Technique. After TrioClear™, F.I.T. was used to improve the class II and to restore the length and function of the elements.



Dr. T.N. Kwee

Taco Kwee is a dental implantologist. He studied dentistry at Catholic University Nijmegen, where he graduated in 2004 at the age of 24. Since 2016, he has focused on reconstructive (restorative) dentistry in addition to implantology. He is currently in the final phase of his training as a Restorative Dentist NVVRT. Besides all this, Taco is a guest fellow at ACTA and a volunteer at the Kruispost in Amsterdam. There, he supervises dental students in performing consultations and extractions on undocumented people who do not have access to regular oral care.

Woman
40 YEARS

Tooth sensitivity
Cold/Warmth, Food
impaction

Pre-restorative
preparation
requirements

Enamel Erosion on all
elements

Crowding /
Malocclusion

TREATMENT STARTING



TREATMENT PLAN



Staging

FDI Notation	Staging Value
15-14	0.5
14-13	0.5
21-22	0.4
22-23	0.4
23-24	0.3
25-26	0.4
26-27	0.5
27-28	0.5

Treatment Plan

The teeth numbering using FDI notation

Step	Clinical Remind
1	Before wearing the aligner, please perform IPR on the teeth: [15-14 : 0.5mm][14-13 : 0.5mm][24-23 : 0.4mm][25-24 : 0.5mm] [26-25 : 0.5mm]
6	Before wearing the aligner, please perform IPR on the teeth: [11-21 : 0.4mm][22-21 : 0.4mm][23-22 : 0.3mm]
Others	<ul style="list-style-type: none"> * During orthodontic treatment, please check the tooth contact at any time and conduct IPR with a sand sheet if necessary. * When grinding the teeth, please ensure the mesial and distal side of the tooth are within the working range. * During orthodontic treatment, please check early if there is any occlusal interference and make adjustment. * When the contact of adjacent teeth is poor, please conduct IPR. Please perform IPR in the convex area of the mesial and distal surface.

Simulated Tooth movements and Gingiva. Actual clinical results may vary.

BEFORE AND AFTER



BEFORE



AFTER

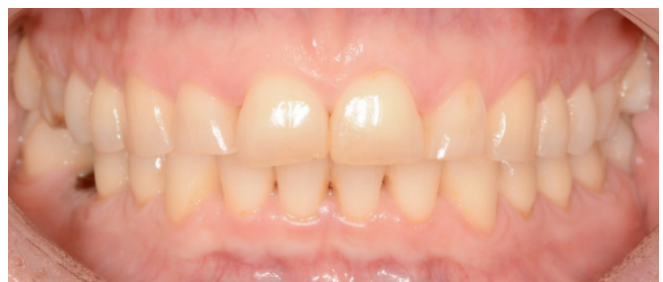
CONCLUSION

Midline correction

Aligned dental arches

Space created for restorations

Alignment with clear aligners in 6 months. IPR in two stages in the upper jaw. No attachments needed.





PART 2: RESTORE

Using the F.I.T. Forma® Injection Technique solution, the aesthetic outcome will be more predictable and the total procedure is less stressful, as part of the treatment, the diagnostic step, can be done outside the mouth, in absence of the patient.

The main advantage of this technique is that restorations can be first designed in the Elysee View Diagnostic tool and then copied and transferred in detail to the natural teeth.

For complex morphologies, challenging aesthetic cases or cases requiring re-establishment of the occlusal vertical dimension, a predictable result can be obtained and chair time reduced with this relatively simple procedure. Adjustments can also be made afterwards if needed.



BEFORE



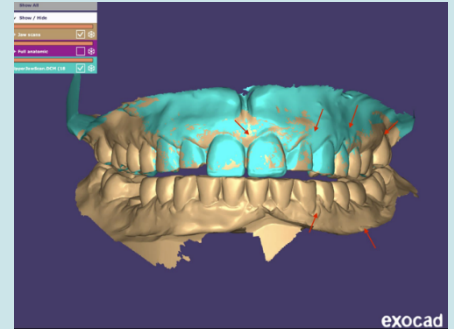
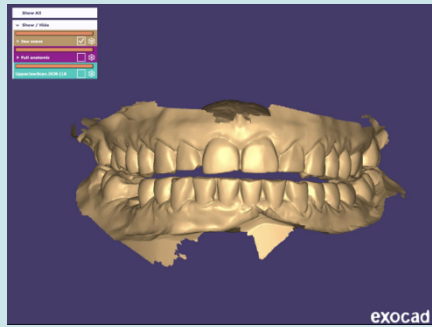
AFTER



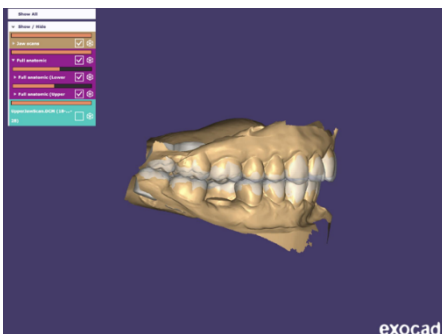
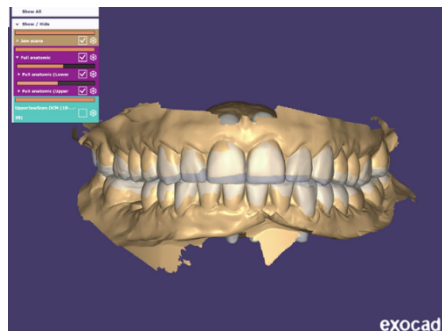
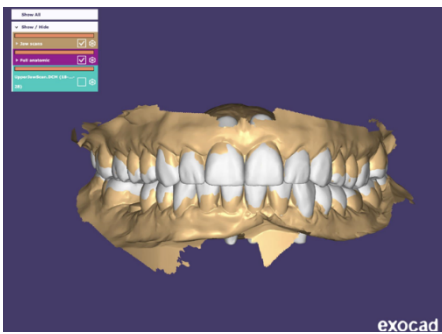
NEW VDO USING LEAF GAUGES

TREATMENT PROCESS SUMMARY

IOS scans with Medit scanner upper jaw and bite scan



Virtual mock-up **Elysee View**



Clinical workflow: Posterior injection



TREATMENT PROCESS SUMMARY

Clinical workflow: Anterior injection



Occlusal and lateral view: Upper and lower arch



End result:



BEFORE



AFTER

DENTIST AND PATIENT FEEDBACK

Dr. T.N.Kwee:

I used the clear aligners from TrioClear™ to align before performing the restorations. This is really a nice option because of the advantages of this aligner system.

"TrioClear™ offers invisible" orthodontics with many possibilities:

- Extra comfort by alternation of soft and hard aligners.
- Less attachments needed by large (gingival coverage)

If teeth straightening was required in the past, many adult patients were, and remain, resistant to traditional fixed-brace orthodontics.

With this TrioClear™ system I can easily convince my patients to choose pre-restorative alignment before applying F.I.T. as restorative treatment.

Patient:

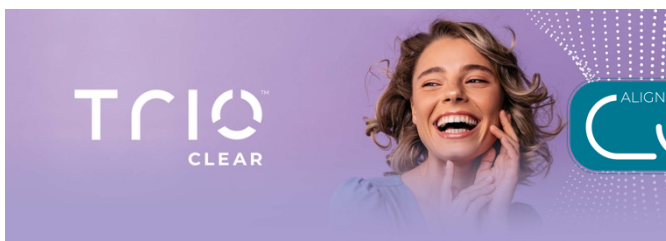
When the Dr. proposed me this pre-restorative alignment, I was immediately convinced of the advantages of aligning before restoration.

Only by doing this my restorations would not only be esthetic but functional too and last longer.

I am very happy with the result and wearing clear aligners was so comfortable. Hardly no one noticed them, and cleaning and eating was easy because they are removable.

The Injection Technique went smoothly and the and result looks amazing.

I can really recommend this to everyone.



Workshop TrioClear™

With this workshop we will train you on how to read the treatment timeline with regard to IPR and to perform this reduction correctly by using the Attachment template. We will also show which instruments are on the market to do this efficiently.

Another action is **placing the designed attachments**. These are composite auxiliaries on the tooth surface that provide **extra and specific forces** for more **complex movements** of teeth. You will learn how to read the clinical card and how to place these attachments correctly. Tips for monitoring the condition of these attachments during treatment will be given.

Visit the local website to register for the workshop.

Workshop TrioClear™

Discover all details on this biomimetic solution treating tooth surface loss / tooth wear and trauma cases using an **efficient workflow** to improve aesthetics and function.

In this hands-on session we practise the injection technique on models and share tips & tricks.

Visit the local website to register for the workshop.