

# Resolving upper anterior spacing

**DR NIKOLAOS LILIS** leads us through the treatment of maxillary spacing in just over six months using In-Line clear aligners without attachments

People of all ages want a beautiful, natural smile as well as healthy teeth and gums. An increasing number of adult patients with anterior spacing or crowding adults are willing to undergo orthodontic treatment in order to achieve this. However, they sometimes want the appliance to be as inconspicuous and comfortable to wear as possible. In many cases the patient can be treated successfully with aligner therapy. In this case the anterior spacing was treated with In-Line aligners produced in Germany [www.in-line.co.uk](http://www.in-line.co.uk).

## INITIAL SITUATION

The patient wanted to resolve her maxillary spacing in order to improve the appearance of her smile. She initially expressed a desire

to have the malalignment corrected with a therapy which should be as invisible as possible. The severity of the spacing was immediately apparent from a frontal view (Figure 1). However, the mal-alignment is also clearly seen when viewed laterally (Figure 2) or from occlusion (Figure 3)

As a part of the diagnostics, a study model and OPG were produced. Clinical examination showed that the patient's teeth and gums were otherwise healthy with no problems relevant to orthodontic treatment.

## TREATMENT DECISION

The patient was informed about all the available treatment options. In addition to treatment with In-Line, other treatment options were discussed with the patient. The dentist informed



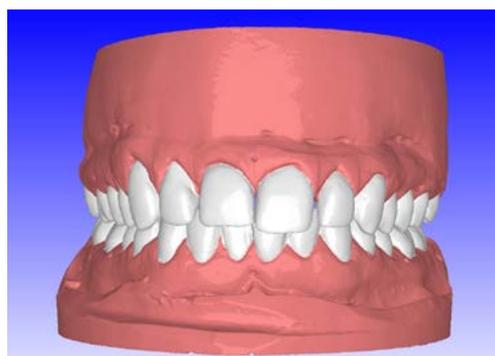
**Figure 1:** Initial situation frontal view



**Figure 2:** Lateral view of maxillary anterior spacing



**Figure 3:** Occlusal view of maxillary anterior spacing



**Figure 4:** Frontal preview picture in occlusion

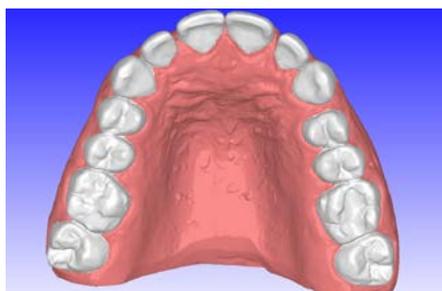
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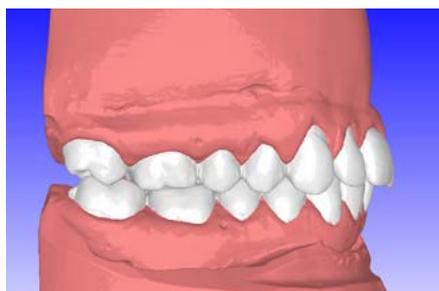
**Dr Nikolaos Lilis DDS**

graduated from the Dental Department of the

Aristotle University, Thessaloniki (Greece) in 2002 and soon after in 2004 he began his dental career in the UK as an associate dentist. He founded Ealing Dental Studio, a private dental clinic in 2012 offering a high standard of quality care in both general and cosmetic dentistry. The ease and the comfort of the In-Line aligner system was an immediate success with patients in achieving the desired smile.



**Figure 5:** Upper arch preview from occlusion



**Figure 6:** Lateral preview picture in occlusion



**Figure 7:** Frontal view after less than seven months treatment



**Figures 8 and 9:** Post-treatment pictures



**Figure 9**

the patient that a more comprehensive treatment result can often be achieved by using fixed appliances. However, even braces made of tooth coloured ceramics were rejected by the patient on both aesthetic and comfort grounds.

### UNIQUE CHARACTERISTICS OF IN-LINE ALIGNERS

The patient was shown a sample of an In-Line aligner. This solution met her need for comfort; the aligners are very comfortable as they are made from a patented twin layer plastic which is scalloped to the gingival margin. They affect the patient's speech only initially and are visually barely noticeable. The aligners' 'rubbery' inner layer clings to the teeth eliminating the need for the composite attachments/anchors used by nearly all other aligner systems.

The placement of attachments can be time consuming and removal of attachments introduces a risk of causing damage to enamel tooth surfaces.

Each aligner is able to move the teeth up to 0.7mm (over a four to six-week period). This compares favourably with other systems that only move the teeth up to 0.2mm per aligner. The result of this is that far fewer aligners are required to accomplish a treatment and treatment times tend to be shorter.

### TREATMENT PLANNING

A quotation with treatment recommendations and a digital set-up/

preview was requested from In-Line. The preview includes five images of the final situation, allowing the patient to see how her teeth will appear post treatment from all angles (Figures 4, 5 and 6). The treatment proposal prescribed six aligners to be worn for four to six weeks each.

### TREATMENT PROGRESS

The patient was given new aligners successively at individual check-up appointments, at intervals of approximately four weeks. The patient wore the aligners for the recommended time of at least 20 hours a day and the treatment goal was reached in less than seven months (Figure 7). Comparison of the pre-treatment photographs (Figures 1, 2 and 3) with the post-treatment photographs (Figures 7, 8 and 9) and the preview set-up pictures (Figures 4, 5 and 6) show how comprehensively the treatment goal was attained in a little over six months.

### RETENTION

Long term retention is crucial following adult orthodontic treatment in order to avoid the risk of potential relapse. A long term retention package is included with all In-Line aligner treatments: This consists of either two durable removable night time retainers per arch or a 3-3 fixed/bonder wire retainer with a durable removable retainer fitting over the top. In this case the patient chose the 3-3 bonded wire retainer package as her chosen method of long term retention (Figure 9). 

### FOR MORE INFORMATION

If you would like more information, please email Nikolaos at [info@ealingdentalstudio.co.uk](mailto:info@ealingdentalstudio.co.uk) or check the website for further information. [www.ealingdentalstudio.co.uk](http://www.ealingdentalstudio.co.uk)