

Correcting overjets

Raj Kumar reviews a recent orthodontic case.

Orthodontics is a speciality that is taught very little at the undergraduate level. Students get a few lectures and learn how to make a removable acrylic appliance, and perhaps they may even get to treat a few simple cases. The majority of teaching is done at post graduate level. I studied at Guys Hospital, we were taught comprehensively the structure of the tooth, crown and veneer preparation and dental materials. I qualified in 1989 at the time of no prior approval. One of my first patients had severely proclined but healthy teeth. I prescribed orthodontics or crowns but the patient opted for a quick fix. I still remember how I decoronated 6 upper anterior teeth, root filled them and post prepped them all in one sitting (this was certainly not minimally invasive dentistry). Tapered metal cast posts and porcelain bonded crowns were prescribed and fitted. Twenty-three years later the teeth are stable and nothing has failed.

Nowadays some patients book themselves in with a cosmetic dentist and ask for advice. Some dentists will touch on the subject of fixed braces and steer the patient towards a smile makeover. Others will not touch on the subject of smile makeovers but will steer the conversation towards orthodontics. I am in the latter camp. Over nine years I have consulted over 3,000 or more patients, each with a 30-40 minute free consultation and I can honestly say that only around five patients actually wanted only a smile makeover.

I would put the fact that I have been able to do so many orthodontic cases down to the fact that I use Invisalign. Invisalign is a clear aligner system that incorporates 3D scanning, treatment



alignment software and then 3D printing.

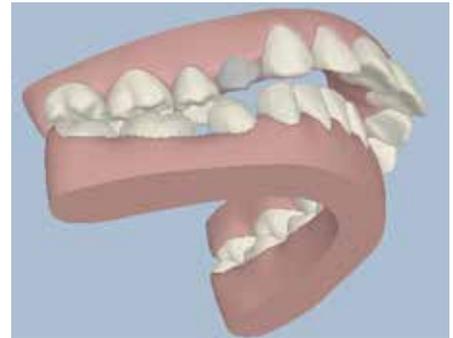
Patient selection

As with all orthodontics, patient selection is vital. Invisalign is suitable for an overjet case because we can use attachments for retention and anchorage. In the following case the overjet was extreme and yet the treatment was beautifully simple.

Five years ago I was exhibiting at a wedding show when a girl approached me about her teeth. She had a very large overjet and had booked herself in for veneers. I noticed that her overjet was more than 10mm. I advised her that I didn't think veneers were the right choice for her and asked her to book



Clincheck lateral view start.



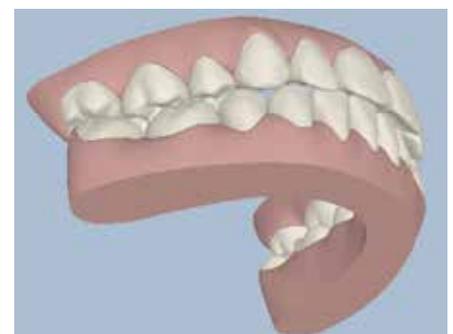
Clincheck overjet start.



Occlusal start.



Clincheck lateral finish.



Clincheck overjet finish.

Raj Kumar

is a dentist with a special interest in orthodontics.



Occlusal finish.



Closure of 10mm overjet.



• a no obligation consultation to discuss orthodontic treatment.

The patient was a 25 year old female with class II div II occlusion, skeletal II alveolar base with a 10mm overjet. She was not suitable for veneers or aggressive interproximal reduction. Impressions and an OPG were taken

for orthodontic assessment.

The initial scans were based on interproximal reduction (IPR) but this only reduced the over jet by 5mm. The final scan reduced the over jet by 8mm and we agreed on this treatment. The treatment plan included upper 4/4 extraction with upper

anterior retraction and lower posterior mesialisation.

There were 33 upper and 29 lower aligners. Attachments were 356/356 upper and lower. The 6s were used for anchorage instead of head gear. The overjet was measured by the Align technicians and the number of aligners planned on the basis that each aligner produces 0.3mm retraction. I extracted the teeth and fitted the aligners. I added acrylic pontics to the first 14 aligners until the space closure was adequate. The patient attended every eight weeks and after about 15 months we had complete retraction. The final overjet was 1-2mm. The extraction spaces were closed and the buccal corridor was filled. The patient commented that even though she paid £4,000, I did not mind how many times that she came in.

Clear aligners can be a real substitute for fixed braces. But you have to plan well and use a tried and tested system. If you are planning to use clear aligners then please do your research. Make sure the system you use is effective and will give the patients the final results that they demand.

Think implants

Treatments for missing teeth that compromise natural dentition and healthy gums should nowadays be viewed as a last resort, according to UK [dental implants](#) provider Dentsply Implants. In its latest campaign, 'See a gap, think implants', the company urges general practitioners to present the option of dental implants positively to their patients and get involved with providing the final restoration.

Tim Earl of The Lodge Dental Practice, Uckfield, has been restoring [dental implants](#) for almost 10 years. He says: "When assessing the clinical situation, the condition of neighbouring teeth must be considered before deciding on the optimum treatment. In a mouth with little restoration, there should be minimal damage to adjacent teeth. We are born with individual teeth and individual teeth should be the first choice as replacements where possible."

When some dentists see a gap, they immediately recognise implants as the best solution, but many general dental practitioners only seriously consider implant treatment after all other clinical options have been exhausted. Patients who have struggled with gaps, conventional bridges or dentures for years find that implants finally give them the ability to eat, talk

and smile with confidence.

Denture wearers can experience bone loss which may alter the look of their face, according to Matthew Holyoak of Woodlands Dental, Lytham St Annes. Matthew explains, "This can be avoided with the implant-supported full arch bridge. Another advantage is that the teeth are fixed, which avoids loss of function and discomfort for the patient."

Cost-effective

According to the British Dental Health Foundation patient information leaflet on dental implants, "Over the longer term, implants are usually a more cost-effective and satisfactory option."

Patients are becoming more aware of the benefits, as Mary Green of Richmond House Dental Practice in Chichester has found: "The number of patients asking about dental implants has rocketed. Nowadays people realise that it is the best long-term investment."

Providing [tooth implant](#) treatment can help strengthen patient relationships and enhance practice reputation. Louise Henvey of St John's Road Dental Practice in Edinburgh explains, "To be able to offer restoration of implants in practice has advantages for both the patient and the dental team and it gives the opportunity to become more involved in the treatment planning."