The bigger picture

Dr Koray Feran looks at how restorative dentistry has progressed in the past few years and compares some of the materials on the market.

Over the past five years or so I have noticed a gradual, but distinct consensus across the disciplines, so that the procedures we are carrying out are backed up with stronger evidence. We seem to have developed a much better understanding and agreement of the treatments we carry out for our patients. Of course, there are still gaps, but we are all heading in the right direction.

Behind the scenes
I have great admiration for the unseen supporters of our profession that are continually striving to make advances in the right direction.

Although it may sometimes seem overwhelming, the huge choice of materials and equipment available to us is a minor miracle and underpins the success of what we do.

There is a proliferation of courses, conferences, symposia, mentoring and publications. My personal feeling is that people are talking to each other more freely than they did before; they show more willingness to share their experiences and their failures, discussing the black holes in our knowledge that people use to shy away from in the past.

As far as one particular item is concerned, the profession has put a lot of faith in zirconia and especially CAD/CAM manufactured zirconia restorations. The material itself is pretty tough and easily the most durable ceramic we have at our disposal; however, the problems experienced with adhesion of veneering porcelain and cement to this material – as well as its degradation over time when exposed to the punishing oral environment – is still a subject for intensive debate.

I hope that the problems are ironed out and we can keep zirconia. However, some very experienced practitioners around the world are finding a greater cumulative failure rate of zirconia-based restorations as years go by, so this might be one technology where I would recommend not putting all of your eggs in one basket yet.

How patients benefit
One would hope that through better knowledge and acquisition of more advanced skills, more of us are in a position to assist our patients with the problems they face. The use of stronger aesthetic materials that bond better to teeth will hopefully mean less frequent revision being necessary during the patient’s lifetime and greater reliability of our treatment. However, again it must be stressed that this will only occur if the clinical techniques and control with which these materials are used is of a high standard.

As for the future, who knows? I would like to see a drive towards better 5-D documentation, such as digital impressions and digital studies of dynamic mandibular movement to assess occlusal function and balance in larger restorative cases.

I would also like to see an improvement of communication and workflow between clinicians and laboratory technicians and hopefully see an increase in the compactness of some of the equipment we use such as curing lights, implant motors, piezosurgery devices, x-ray sensors and apex locators, for example, which take up such a huge amount of room in our surgeries.

Of course we all await the advances in genetic engineering that will allow the growth of new teeth. Maybe not during the next five years...although you never know.

About the author
Dr Koray Feran qualified in 1989 from Guy’s Dental Hospital, winning the Final Year Prize for overall excellence and the Sir Kaye Prize in Oral Medicine and Pathology. He remained at Guy’s for two separate House Surgeon appointments in Prosthetic Dentistry and then Oral and Maxillofacial surgery till 1991 when he went into general practice in North London. After completing the Master of Science degree in Periodontology from Guy’s Hospital, he obtained a PhD (Restorative Dentistry) Fellowship in Dental Surgery from the Royal College of Surgeons of England. He has since been in practice dedicated to quality dental care, having a special interest in multi-disciplinary cases that require detailed planning and co-ordination of several specialist branches of dentistry. For more information or to refer to Koray, contact The London Centre for Implant and Aesthetic Dentistry on 020 7224 4888, koray@korayferan.co.uk or by visiting www.korayferan.co.uk.