Ailsa Nicol reports:

had the good fortune to co-chair one of the parallel sessions at the EAO's 2013 meeting in Dublin. Titled 'Replacing a missing incisor', it was an exciting session to be involved in as it had a significant clinical focus. It was co-chaired by Klaus Gottfresen and featured a range of excellent speakers who are experts in their fields.

Franck Bonnet spoke first on 'Clinical techniques for predictable results', providing a great introduction and overview of the topic. He described a number of different techniques to manage a lack of hard and soft tissues, illustrating his presentation with clinical cases showing both delayed and immediate implant placement. He described management of the 'pink volume', especially with immediate implants, and the use of palatal placement to minimise problems with uncontrolled bone and soft tissue resorption.

Markus Hürzeler's presentation was entitled 'Gingival recession on teeth adjacent to implants'. He described an approach that used tunnelling techniques as an alternative to lifting a flap involving papillae, supported by beautiful illustrations. He spoke about the difficulty in determining the wound healing capacity of patients, as this is usually unknown and can introduce problems with predictability of clinical outcomes. Using a tunnelling technique with connective tissue grafting can avoid this issue, and Markus Hürzeler described the ideal thickness of a connective tissue graft as 1.44mm.

Mariano Sanz then discussed 'Is immediate implant placement worth the risk'? He spoke about how he ensures predictability of results with immediate implant placement in his clinical practice, also advocating palatal placement of the implant when replacing a missing incisor. When placing a single immediate implant, if the buccal bone wall is intact and the patient has a thick gingival biotype, there is typically less than 1mm of buccal bone loss and recession of less than 10%. However, vertical bone resorption is more variable and appears to be more significant anteriorly than posteriorly. Mariano Sanz demonstrated his surgical protocol and referenced it to potential short- and long-term complications, particularly aesthetic ones.

Mauricio Araujo then delivered his presentation on 'The role of socket preservation'. He explained how immediate implant placement fails to prevent buccal bone loss, adding that socket grafts with non-resorbable bone substitutes can compensate for this. In approximately 85% of clinical situations, the buccal bone plate is less than 1mm. The shape of the maxillary alveolus, as well as the root inclination and location of the root apex, influence this buccal bone plate width. This was also a very well-illustrated presentation and concluded the surgical part of this session.

The final presentation was by Irena Sailer who described a prosthodontic-based approach to 'Restorative options for aesthetic defects'. She demonstrated some challenging situations where implant rehabilitation may have resulted in a compromised result, and where other restorative options such as resin-retained fixed dental prostheses resulted in improved aesthetic outcomes. She also presented some new research looking at pink aesthetics, in particular with pink-coloured ceramics and the challenges in matching these to the patient. It was interesting that pink colour changes seem to be (more) obvious to the patient and clinician. Also, those patients with thin soft tissue are more susceptible to these aesthetic challenges in replacing pink volume. Irena Sailer also demonstrated the importance of ensuring that restorations in challenging prosthodontic and surgical implant situations can be cleaned without difficulty.

In summary, this was a great clinical session, with excellent speakers, which was well attended, with a lively interactive discussion to conclude.
Jaime Jiménez García reports:

During the session titled ‘Replacing a missing incisor’ four important aspects were mentioned by most of the speakers:

- preservation of the alveolar ridge
- implant placement
- the importance of soft tissue
- the type of restoration

Preservation of the alveolar ridge (socket preservation) was recommended when the bone wasn’t present or in those cases where it was present but for some reason immediate implant placement was not an option.

The importance of placing the implant in the correct tridimensional position (medio-distal, apico-coronal and bucco-lingual) was also stressed, with reference to guidelines published by Grunder et al in the International Journal of Periodontics & Restorative Dentistry in 2005.

Timing of the implant placement was considered to be a critical factor in terms of achieving good long-term results. All the speakers agreed that although immediate placement (implant placed on the day of extraction) is preferred by many patients, it is a very delicate process that is not always appropriate. It has the advantages of reducing treatment time and the number of surgical intervention, but when opting for immediate placement appropriate case selection is critical to ensure high success rates.

The width of the buccal plate should be analysed, with treatment being more predictable when it of greater width. A study was described in which only 2.6% of buccal plates in the anterior region of cases sampled measured 2mm or more (Huynh Ba G et al, Analysis of the socket bone wall dimensions in the upper maxilla in relation to immediate implant placement. Clin Oral Implants Res 2010;21(1):37–42).

Due to the importance of preserving the buccal plate, when an implant is placed immediately, the recommended position is slightly towards the palate to try to avoid damaging the buccal plate. It was recommended that the ‘jumping distance’ between the buccal plate and the implant should be grafted to avoid (as far as possible) the collapse of the buccal plate and therefore of the soft tissues.

For those cases where immediate placement is not appropriate, delayed or early implant placement was recommended. In both cases the use of guided bone regeneration (GBR) to over-contour the area – either before implant placement or at the time of placement – was recommended to achieve good long-term aesthetic results.

With regard to soft tissue volume, the importance of the width of the soft tissue was stressed in order to avoid recession. Microsurgical techniques using micro instruments and macro loops were recommended. Hürzeler MB et al (submitted for publication) recommended the tunnelling technique using the coronal advance flap technique.

The type of restoration is a critical aspect in achieving good final results. The timing of placement of the first temporary, the materials used, as well as the form, are the main aspects to be considered for achieving good responses in the soft tissue area.