

Meeting Report

BOS Presidential Meeting, Saturday 8th May 1999

The sixth Presidential Meeting of the British Orthodontic Society was held on 8th May at Heythrop Park, Chipping Norton, Oxfordshire. Dr David Lawton, chairman of the BOS, welcomed everyone to the meeting, but had the sad task of announcing the resignation of the current president of the BOS, Professor Barry Leighton. Following a recent illness, Professor Leighton felt unable to continue with his duties as president and offered his resignation which, with great regret, was accepted by the BOS committee. Dr Lawton asked Dr David DiBiase to take Professor Leighton's place and chair the morning session.

Dr DiBiase began by introducing the day's speaker Professor Vincent Kokich. Professor Kokich works in the department of Orthodontics at the University of Washington, Seattle and has a private practice in Tacoma, Washington, USA. He has published many scientific and review articles, and contributed to 11 book chapters. He has given over 350 presentations throughout North and South America, Europe, Africa, Australia, and Asia. Those delegates who had attended the 1993 BSSO conference in Glasgow and had heard Professor Kokich speak, knew that the day was not to be missed. Professor Kokich's remit for the day was to discuss the management of the more demanding problems that arise in modern orthodontic practice, with particular reference to the use of implants.

The first presentation covered the use of single tooth implants for the restoration of absent second premolars and upper lateral incisors. Professor Kokich illustrated how occlusion and aesthetics influence the amount of space required for an implant. He emphasized the importance of establishing the occlusion and then concentrating on achieving optimal aesthetics. Ideally, the lateral incisor should be two-thirds the width of the central incisor, the so called 'golden proportion'. Previously, the space needed for the 3.75-mm implants was often larger than that required to produce an aesthetic result. The advent of the narrow 3-mm implant, produced by Nobel Biocare in 1993, has helped in achieving these aims. Professor Kokich also stressed the importance of having sufficient space in order to produce a papilla, as gingival contour is the key to excellent aesthetics. He demonstrated this beautifully with two clinical slides that fooled us all! Other practical issues addressed included, the best time to place implants (once growth has ceased to avoid implant infra-occlusion), whether or not to remove deciduous teeth if the successor is absent, and how to use orthodontics to facilitate ridge augmentation for implant placement. Of particular interest was the recommended removal of the deciduous lateral incisor, if the successor is absent (especially if it has been traumatically avulsed), so that the canine erupts adjacent to the central incisor. Later, it may be moved distally into the correct position, leaving behind a much improved alveolus for the implant than would otherwise have been the case.

The second presentation was on the use of implants for orthodontic tooth movement. Professor Kokich acknowl-

edged the potential for 'onplants', but as these are currently at an early stage of developments, the lecture was confined to discussing those that are later used to support a prosthesis. Professor Kokich began by highlighting the beauty of using an implant for anchorage during treatment and its later utilization as an abutment. He emphasized the importance of carrying out a diagnostic wax-up in the treatment planning stage to ensure the implant will be in the ideal position to ultimately support the prosthesis. Once an implant has been placed, evidence suggests that it may be loaded following one complete bone remodelling cycle (one sigma). In humans this equates to approximately four to five months. There is no evidence to suggest that occlusal loading causes disintegration of the implants, and so far it has not been associated with those implants that have been orthodontically loaded. The success rate of implants used for orthodontic loading has yet to be assessed.

Following lunch and a very well represented trade exhibition, the afternoon session began under the chairmanship of Dr David Lawton. Professor Kokich spoke on 'Anterior Aesthetics: Role of the Orthodontist'. The orthodontic profession is increasingly challenged by the number of adult patients seeking treatment. Often, these patients present with heavily restored or worn teeth, a history of periodontal disease, and a less than ideal occlusion. In achieving optimal aesthetics for these individuals, not only should alignment, marginal ridge height, overjet, overbite, and occlusal contacts be corrected, but particular attention



Left: David Lawton—Session Chairman and BOS Chairman. Middle: Vince Kokich—speaker. Right: David DiBiase—Session Chairman and BOS President Elect (1999–2000).

should be given to crown length and width, and also gingival contour. Professor Kokich spoke of an occasion when he had been extremely pleased with a completed case, only for the patient's dentist to telephone him to say the patient was not happy because the gingival heights of the upper central incisors were not the same, something Professor Kokich had failed to notice throughout the treatment! Judging from the response in the lecture theatre many within the audience identified with this situation. Professor Kokich went on to explain how important it was in adult patients with a worn dentition to line up the gingival margins not the incisal edges at the start of treatment and then correct the crown length on completion of treatment. The management of peg-shaped lateral incisors was also discussed with particular emphasis on where the tooth should be positioned in the space to facilitate its restoration. Finally, Professor Kokich discussed the importance of gingival form and, in particular, the management of the unsightly 'black triangle' Professor Kokich explained that in order to address the problem of black spaces four factors need to be assessed: (1) papilla versus contact point; (2) root angulation; (3) tooth shape; and (4) tooth size. Ideally, when assessing the papilla versus contact point relationship, the papilla should take up 48 per cent of the crown length. The width:length ratio of the tooth is also important and should be approximately 67–75 per cent. If

the width:length ratio of the tooth is greater than 60 per cent, the tooth should be reshaped, whereas if the ratio is less than 60 per cent a restorative option is a more appropriate solution to the black space. Interestingly, Professor Kokich described the papilla as a 'fluid-filled bag' that can change shape as the shape of the embrasure is altered.

The final topic of the day was 'Interdisciplinary Treatment: the Agony and the Ecstasy'. Professor Kokich used his last lecture to highlight that treatment of the debilitated adult patient does not mean a compromised result. He emphasized the importance of a team approach to the planning and execution of interdisciplinary treatment. This was illustrated by the demonstration of some extremely challenging cases. Exemplary functional and aesthetic rehabilitation was achieved by the interdisciplinary teamwork of the specialists involved.

Dr Lawton thanked Professor Kokich for a superb day of lectures on orthodontics, implants and interdisciplinary treatment. In his third talk, Professor Kokich quoted Gottlieb, saying that as a profession we should strive for a 'beautiful arrangement of beautiful teeth, rather than just 'a beautiful arrangement of teeth'. Professor Kokich's lectures and enthusiasm in the pursuit of clinical excellence could not be better encouragement for the speciality.

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