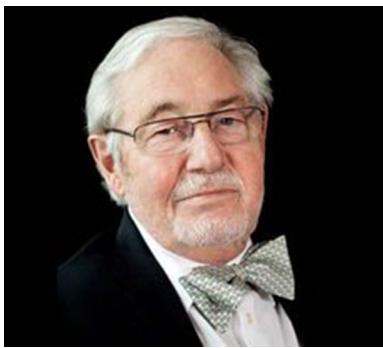


The father of Osseointegration and the godfather of the BAHA: Professor Per-Ingvar Bränemark, Göteborg Sweden has passed away in his 86th year

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Published online: 5 March 2015
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Bränemark got his medical training at University of Lund where he studied rheology in the living bone of the rabbit. During these studies he noted bone fragments on the surface of his titanium implant, in those days a metal not commonly used in medicine. This capacity of serendipity opened the way for modern implantology. He coined the finding *osseointegration*, a term today well known especially amongst otolaryngologists [1].

In 1960, he moved to University of Göteborg. He got numerous awards and been honorary doctorates at 29 universities. He guided more than 40 Ph.D. students to dissertations.

The first clinical application of osseointegration was dental implants in the edentulous jaw [2]. Today this is considered as the golden standard for bone-anchored dentures and millions of patients all over the world have benefitted from his pioneering work.

Bränemark tried to find an acoustic way to evaluate implant stability. This became one of the starting points for hearing through direct bone conduction. Patients hard of hearing cannot always be helped with surgical reconstruction and some cannot use a conventional hearing aid. Chronic ear disease and congenital malformations are two reasons for this. Bränemark suggested placing titanium implant in the bone behind the ear and after healing an impedance-matched transducer was attached to the implant. This work was made in close cooperation between him, the Department of Otolaryngology at Sahlgrenska University Hospital in Göteborg and Chalmers University of Technology also in Göteborg. Bo Håkansson, now professor at Chalmers, was the innovator of the new transducer that since then has been refined and become smaller and yet more effective [3, 4].

In 2005, Cochlear BAS was created and R&D became a top priority, and today, the BAHA is a most sophisticated device. Oticon Medical has today also a hearing aid based on the same principle, the Ponto. It has been estimated that about 200,000 patients hard of hearing benefit from direct bone conduction based on professor Bränemark's concept of osseointegration.

Working close with us at the Department of Otolaryngology Bränemark also met patients with facial defects due to tumour surgery, trauma or congenital malformation. These groups of patients are suffering heavily from their defects. Many of them do not take part of social life; some did not even go out in daylight hours. Using the same implants as for the BAHA the patients got implants for retention for facial prostheses made of Silicon. The technical and artistically development was made by anaplastologist Kerstin Bergström at our Implant Unit.

Bränemark took an eager interest in this work, and especially in major defect, he was often the leading

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surgeon. Through his many contacts he could bring in specialist from any other disciplines such as oral surgery, prosthodontics and engineering; a true multidisciplinary approach in benefit of the patient. The work with craniofacial prostheses is today an integrated part of the Cochlear BAS called VistaFix.

Those of us who had the fortune to have Per-Ingvar Bränemark as our teacher, mentor and friend have been very lucky. The empty space he has left will be hard to fill. One remarkable thing of this world-renowned scientist who more than once caused friction in higher academic strata was his bedside manner with his patients. Whatever happened the patient was always in the centre.

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