Denture wearers’ oral health affects systemic health

A review of the GSK-supported symposium, ‘Impact of Tooth Loss on Oral and Systemic Health’

By Lisa Townshend
Dental Tribune U.K. Edition

As new evidence emerges about denture plaque and biofilms, the indication of an increased risk to denture wearers in the development of oral and systemic diseases is an issue that needs to be discussed.

At the FDI’s Annual World Dental Congress, held recently in Brazil, GSK supported a timely symposium dedicated to the importance of denture and oral hygiene in denture wearers and its potential impact on their oral and systemic health.

Key messages from this symposium included:

- Unclean dentures are a chronic source of potentially harmful bacteria and fungi that may be associated with oral and systemic diseases.
- Dentures need to be cleaned daily with effective antimicrobial and antifungal agents.
- Dental professionals play an important role in educating patients and helping them improve their oral and overall health.

Claudio Fernandes, professor of prosthodontics at Fluminense Federal University at Nova Friburgo, Brazil, chaired the international panel of experts. Fernandes highlighted the growing edentulous population globally, the resultant oral health implications and the role of dental professionals in dealing with associated issues.

“Dentists must take a look beyond how dentures are fitting and functioning; dentures must integrate into patients’ health. If they are fulfilling their function, we are really restoring health for patients,” Fernandes said.

The symposium speakers and their key points included:

- Dr. Zvi Loewy, vice president of Dental Care R&D at GSK, and a faculty member of New York Medical College and Drexel University in the United States, looked at “Edentulism: Public Health Impact.”

Prevalence of denture wearing patients ranges from 12 percent to 63 percent globally. Studies show an increased risk of certain systemic diseases in denture-wearing patients, which have an impact on the public health system.

- Dr. Angus Walls, professor of restorative dentistry and director of research at the School of Dental Sciences, Newcastle University in the United Kingdom, discussed “Implications of Oral Health and Nutrition on Systemic Health.”

Dietary changes associated with the loss of teeth can result in an unhealthy diet, low in fruits and vegetables and with increased fats and sugars, Walls said. Denture stability is key to improving confidence in chewing ability, and is one of the parameters necessary to help patients improve diet and quality of life.

The use of denture adhesives may help to stabilize the dentures or help improve masticatory efficiency. Evidence shows that as edentulous patients’ nutritional intake declines, the function of the immune system and body repair is suppressed; perfect conditions for the development of oral and systemic diseases, Walls said.

- Dr. Wenyuan Shi, chairman and professor of oral biology at UCLA School of Dentistry, and professor of microbiology and molecular genetics at UCLA School of Medicine in the United States, discussed “Microbiology of Denture Patients,” and reiterated the deep connection between microbiology and dental diseases.

Between 65 to 80 percent of denture patients have stomatitis caused by Candida albicans and Candida glabrata, and other pathogens present on dentures are implicated in respiratory and gastro-intestinal infections. He advocated the elimination of microbial pathogens on dentures as very important, Shi said.

- Dr. Steven Offenbacher, OraPharma distinguished professor of periodontal medicine, chairman of the department of periodontology in the School of Dentistry at the University of North Carolina at Chapel Hill in the United States, presented on “Strategic Approaches for Denture Wearers Based on Periodontal and Prosthodontal Research.”

He detailed the importance of edentulism in systemic diseases, not as a major cause but more as a risk factor. He reiterated that den-