Xerostomia and hyposalivation are not such ‘dry’ subjects

The opening plenary session, ‘Xerostomia and Hyposalivation: Mechanisms and Solutions,’ at the European Association of Oral Medicine Meeting

By Lisa Townshend, Dental Tribune
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The 10th biannual meeting of the European Association of Oral Medicine (EAOM), held in London, was a truly collaborative effort. Organised by the EAOM and London’s three dental schools (King’s College London, Queen Mary University of London and the Eastman Dental Institute of University College London) and supported by GSK, the conference highlighted the importance of oral medicine in diagnosing and treating conditions such as xerostomia and hyposalivation.

The opening plenary session of the main part of the conference was dedicated to this topic. After opening remarks by Baroness Gardner of Parkes and Chief Dental Officer for England Dr. Barry Cockcroft, it was time to turn over the session to the two chairs, Prof. Isaäc van der Waal (head of the department of oral and maxillofacial surgery and oral pathology of the VU University Medical Center/ACTA Dental School, Amsterdam) and Prof. Crispian Scully, CBE (director of special projects at the UCL-Eastman Dental Institute and professor of special care dentistry, University College London).

After setting the scene for the session, they introduced the first speaker, Prof. Stephen Porter. Porter is director and professor of oral medicine of UCL Eastman Dental Institute. His presentation, “Hyposalivation: Prevalence, assessment, differential diagnosis and quality of life impact,” gave a general overview of the problem of xerostomia in terms of prevalence.

He discussed the age factor in the condition, as well as issues such as immune-suppressant disease and drug/ radiotherapy treatments. He also looked at the issue...
from the point of view of the patient, whose quality of life can be affected because of reduced sleep and impaired eating function.

Next to speak was Dr. Jackie Brown, specialist in oral and maxillofacial radiology. She is a consultant in dental and maxillofacial radiology at Guy’s and St. Thomas’ Hospitals Foundation Trust, and is senior lecturer at King’s College London Dental Institute of Guy’s, King’s College and St. Thomas’ Hospitals and at the Eastman Dental Institute.

Brown’s presentation, “Contemporary imaging in salivary gland disease diagnosis,” looked at the role of imaging in the distinguishing and identifying of diseases affecting the salivary glands. She discussed the various imaging equipment available, including ultrasound and cone-beam computed tomography (CBCT), and their advantages and disadvantages.

Then it was the turn of Prof. Gordon Proctor, professor of salivary biology, head of salivary research unit, department of clinical diagnostics, sciences, King’s College London Dental Institute. He discussed “Drug related hyposalivation: a review of physiology and sites of drug action.”

Proctor highlighted the relationship between drug therapy and salivary flow rates. He discussed the findings from various studies looking at this relationship, including one specific paper by Wolff et al., “Major salivary gland output differs between users and non-users of specific medication categories” (published in Gerodontology in Feb. 2008).

Speaking just before the coffee break was Prof. Jennifer Webster-Cyriaque, associate professor, departments of dental ecology and immunology, University of North Carolina Chapel Hill Schools of Dentistry and Medicine.

Her presentation, “Virial infections of salivary glands resulting in hyposalivation,” took a look at various viral infections that can affect saliva production, including HIV, herpes and polymaviruses including BKV. One of the main challenges, said Webster-Cyriaque, is determining how viruses get into and infect the salivary cells.

Following the coffee break, where there was a chance to network and discuss the morning’s presentations, came Prof. Roland Jonsson, vice-chairman of the Gade Institute at the University of Bergen. His lecture dealt with “Immunopa-thology resulting in hyposalivation.”

He mainly focused on Sjögren’s Syndrome and discussed the condition in detail and highlighted that along with dry eyes and mouth, tiredness and fatigue are also common symptoms. He also discussed the condition’s association with thyroid disease and osteoarthritis.

Next, Prof. Sue Lightman, Medical Research Council senior clinical fellow and senior lecturer at the Institute of Ophthalmology and consultant ophthalmologist at Moorfields Eye Hospital in London, looked at “Ocular associations of hyposalivation.” She detailed how quickly dry eyes can occur and how conditions such as Sjögren’s Syndrome are initiated.

The final speaker of the session was Dr. Philip Fox, visiting scientist at the department of oral medicine, Carolinas Medical Center, in Charlotte, N.C., and an independent biomedical consultant focusing primarily in the area of clinical trial design and analysis.

This was the part of the session where it took a more practical turn as it focused on the treatment of patients suffering with xerostomia.

The first thing clinicians have to remember, Fox said, is at the end of the day we have to treat patients. One thing clinicians can do is encourage patients to chew and stimulate the masticatory function.

Fox also looked at other different ways of trying to manage xerostomia, including different formulations such as Bioteine produced as gels, gums and mouth rinses.

He concluded by saying that one of the most important issues a clinician can consider is the patients and what makes the mouth feel moist and comfortable for them.

This session was a very detailed look at some of the causes of xerostomia and hyposalivation and allowed delegates to get a better understanding of how these conditions affect salivary flow; as well as get an update in the thinking behind many of the products clinicians can recommend to patients for relief.