Consensus Report of the Indian Society of Periodontology (ISP) & Research Society for the Study of Diabetes in India (RSSDI) on

“The Perio-Diabetes Symposium”
(A joint event on Periodontitis and Diabetes)
8th September 2019, New Delhi, India
Mouth is the gateway to our body. However, when we talk about overall health perhaps oral health is often an overlooked entity and may be best described as “Forgotten Orifice.” Periodontitis, the most common oral disease, is a chronic infection-induced inflammatory condition that causes tooth loss and is also considered a modifying risk factor of systemic health.\(^1\)

Diabetes is a global epidemic disease wherein its complications leave a significant impact on the general health and quality of life. Type 2 diabetes mellitus, in specific, a metabolic disorder, is characterized by high levels of blood glucose resulting from altered insulin secretion or action.\(^2\) Diabetes and periodontitis are highly prevalent multifactorial diseases.\(^3,4\) Profound evidence highlights the risk liability of diabetes and periodontitis independently and bidirectionally.\(^5\) The mechanistic link between T2DM and periodontitis involve immune response, release of high levels of inflammatory mediators and cytokine release.\(^6,7\)

The prevalence of periodontitis and diabetes is on rise in India and we sincerely believe that attention to oral disease in addition to diabetes will improve the ability to identify individuals suffering from either or both diseases. In addition to individual biological variations socio-economic, ethnic, religious and even geographic differences peculiar to our diverse and huge country and its people, poses complex challenges which we all know will be difficult to address completely at any stage.

We as responsible members of our respective national societies are dedicated to create standards of diabetes & periodontal care accessible to all. In order to achieve this we do need to have a certain level of conviction to start with at the outset. Perhaps this seeded the concept in hosting a national symposium by Research Society for the Study of Diabetes in India (RSSDI) joining hands with Indian Society of Periodontology (ISP). It was a pioneering collaboration and an important step of “Creating Awareness”. A bidirectional awareness wherein clinicians from both societies, faculties of dental colleges, post graduate students participated. The scientific highlights consisted of joint deliberations by the resource faculty of both the societies on epidemiologic, mechanistic, pathogenesis, and co-management protocols in periodontitis and diabetes. The experts and panellists in their deliberations tried to build up a common consensus platform with future recommendations.
The symposium proceedings as summarised in this report can be utilized by us to expand an evidence based patient care, which addresses both the periodontal and diabetic management for our patients in an interconnected and holistic manner.
Scientific relevance of Perio-Diabetes Symposium in India

Research documentation on the co-association risks to considerable extent has been appreciated and recognized by diabetologists. Despite this, periodontitis still remains not so well discussed and clinically highlighted disease in diabetic clinical set ups and consequentially remains a serious handicap and an unmet need in diabetes practice in India.

In reference to Indian context, a vacuum remains when it comes to documentation of magnitude and gravity of periodontitis in diabetic populations. Attention also needs to be drawn on all the confounders and variables which do have a direct bearing on both diseases and their medical care standards for co-management. Establishing appropriate referral patterns, communicating across the specialties also would be advantageous for our patients. Sensitizing the bidirectional awareness and management of periodontal health in diabetics and diabetic health in patients suffering from periodontitis is the need of the hour in India. This begins first from “we” the professionals to further percolate and reach our patients.
Evidence based consensus on the co-association of periodontitis & diabetes

1. Pre-diabetics and diabetics have higher chances of developing periodontal diseases. Periodontitis increases the risk of developing pre-diabetes and type-2 diabetes.

2. The causality between the oral microbiome and diabetes, though remains unproven but periodontal microbiome does get affected/altered in the presence of hyperglycaemia.

3. Plausible underlying biological mechanisms mediate the negative impact of periodontitis on the control of diabetes and also accelerates the diabetic complications.

4. The chronic inflammatory state which contributes to pathophysiology of diabetes and its prognosis, itself gets seriously exacerbated in the presence of periodontitis

5. Improving the diabetic control results in improved periodontal health and that in turn helps in better control of diabetes and its complications

6. Clinicians of the respective specialties fully acknowledge and understand the gravity of diabetes and its associated risk with periodontitis and vice versa. The also agreed that the lacuna of understanding and practice about the two disease association needs to be addressed

7. A set of clinical practice guidelines must be developed and incorporated as formal publications by respective societies for the dental and diabetic setups.
Future Directives

The experts and panel of both the societies in the symposium consented upon the following steps to be undertaken as collaborative efforts to fulfil the unmet needs in the areas as discussed and agreed:

1. Similar scientific interactions should be planned by both the societies. This may be small round table meets and / continuing medical (CME) / dental CDE sessions. The aim would be to create more awareness on the issues of bidirectional relationship of two diseases amongst the fellow medical/ dental fraternity.

2. At the respective society conferences/symposia, at least one dedicated session or lecture on the periodontal / diabetes continuum should be a part of the scientific programme delivered by the august members of the dual societies. This would perhaps engage a sound intersociety interaction.

3. Public awareness modules should be developed.

4. Data collection from across the practices in both specialties must be initiated in order to validate the gravity of the health burden posed by periodontitis and diabetes in India.

5. Incorporation of dental/oral health screening in diabetic patients as a part of regular visits and vice versa on screening the diabetic history in patients suffering from periodontitis.

6. MCI and DCI (governing bodies for medical and dental education in India) should introduce chapters in the undergraduate curriculums about the importance of diabetes and periodontal/oral health. This would perhaps sensitize this vital continuum at the undergraduate teaching.

7. Basic oral health information and patient counselling/ education tools must be a part of a diabetic clinic.

8. Cross referrals amongst the diabetologists and periodontists/ dentist for early detection and diagnosis of diabetes and periodontitis.

9. At the society levels collaborative clinical research studies should be encouraged and undertaken.

10. Formulation of clinical guidelines on the co-management of diabetes and periodontitis for the medical physicians and dentists in India
Periodontitis and Diabetes are the two prevalent chronic diseases in India. Importance of maintenance of good oral health is an acceptable recommendation for healthy lifestyle. Considering that both the diseases have a substantial impact on the course and outcome of each other, its important that there be a holistic approach in clinical care management of periodontal health in diabetics and diabetes care in periodontal patients. This pioneering report, is a summary of the proceedings of the symposium, and has been developed by the experts from both the Indian Society of Periodontology and Research Society for the Study of Diabetes in India. This report is the first ever published document to our knowledge in India and we hope that it’s instrumental in “creating an awareness” amongst our fellow medical physicians and dental fraternity in India. Perhaps one of the days we look forward to witness the “Clinical Practice Guidelines” on periodontal / diabetic care in India as well.
References

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