Is there an interaction between polycystic ovarian syndrome and gingival inflammation?

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Periodontal diseases, including gingivitis are common chronic infectious diseases caused by predominantly pathogenic microorganisms that colonize the sub-gingival area and cause local and systemic elevations of pro-inflammatory cytokines resulting in tissue destruction. Gingival cervicular fluid (GCF) is regarded as a transudate enriched with dental microbial and host products that increases as a result of host-microbe interactions. Several lines of evidence established the association between periodontal and systemic diseases, including metabolic syndrome, diabetes and CV disease. Because of the fact that both periodontal disease and metabolic syndrome are associated with systemic inflammation and insulin resistance, these two disorders may be linked through a common patho-physiologic pathway. PCOS appears to be associated with increased oxidative stress and systemic inflammation because females with PCOS have increased markers of lipid peroxidation, C-reactive protein, inflammatory cytokines and percentage of blood lymphocytes and monocytes. The causes of these alterations have not yet been identified but chronic infections may induce inflammation and oxidative stress and possibly contribute to insulin resistance, ovarian dysfunction and other characteristics of PCOS. It is the aim of this lecture to clarify the influence of gingival inflammation and GCF, saliva, serum concentrations of inflammatory cytokines and clinical periodontal findings in PCOS females and to answer the title question whether there is any association between PCOS and gingival inflammation.

Biography
Ozgun Ozcaka has received her DDS degree in 2001 from Ege University and completed her PhD in 2006 from the same university. She was a Visitor in Seattle, University of Washington in 2004 and 2009. She has completed her Postdoctoral study in 2010 from University of Pennsylvania, PA, USA and in Catholic University of Leuven in 2011. Her main interests are mechanisms of interactions between periodontal diseases and systemic diseases such as gestational diabetes mellitus, PCOS. She has published over 22 papers in well-known scientific journals. She is the President of Turkish Society of Periodontology, Izmir Branch.

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