

## 2<sup>nd</sup> ANNUAL DENTISTRY AND DENTAL SCIENCES CONGRESS

January 10, 2022 | Webinar



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#### **New materials for implants Rehabilitation with better behavior to decrease the risk to have periimplantitis**

Implant rehabilitation is one of the most important and common treatments nowadays. In recent times, the materials used for these implant rehabilitations have changed. At the beginning, gold and resin were used, but nowadays, zirconia, lithium disilicate and cobalt-chromium are the most common materials for implant and tooth rehabilitation. The mechanical behavior of these materials is very different from the new materials I want to present. New composites, hybrid composites as veneering materials and carbon fiber, peek (polyether-ether-ketone), graphene, acetal resin for the framework have a completely different quality than zirconia, ceramics, or non-noble metals: they can absorb and dissipate the forces applied (functional and parafunctional forces) to the implants. Teeth have the periodontal ligament to absorb these forces, but not implants. These materials, by absorbing and/or dissipating these forces, reduce the stress in the implant area: bone, implant, prosthesis and gingival area.

All the literature shows us that the stress in the implant area, associated with gingival inflammation, can affect the bone integration of implants, leading to peri-implantitis and possible implant failure. These new materials in a patient with risk or high risk of having gingival inflammation (smokers, poor hygiene, previous periodontitis, genetic factors...) can decrease the risk of having peri-implantitis.

In this presentation, I want to show you different studies (finite element analysis, epoxy resin...) and multiple cases explaining this theory, this philosophy, these new materials. The material used for implant rehabilitation can affect implant survival.

#### **Biography**

Oriol Cantó Navés is a doctor in dental surgery (DDS), universitat de barcelona (UB) (1991) and he did his PhD, in universitat internacional de catalunya (UIC). He is associate lecturer in master of rehabilitation and dental esthetic program and implants program of the universitat internacional de catalunya-barcelona (UIC) and medical director: university dental clinic (UIC). He is a member of the spanish society of prosthodontics and esthetics (SEPES) and member of the implants spanish society: SEI. He attended many scientific conferences.

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