Dental implants: Complications, mishaps and failures

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Everyone knows that dental implants have a better than 95% success rate depending on who you read. But what do you do when faced with that other 5%. This presentation will cover the implant cases and situations that are not normally addressed at implant seminars. The presentation will review the implant components that have the greatest chance of having a mishap or failure as well as the types of failures that can and do occur. This will include everything from loose screws and broken bars to fractured implant bodies and abutments. It will also cover the consequences of peri-implant mucositis and peri-implantitis. Specific cases will be shown to demonstrate each mishap, complication or failure as well as the step-by-step procedures to repair, replace and put the prosthesis back into function. The standard of care states clearly that not only does a dentist have to have the knowledge for the placement of dental implants but also the knowledge of what to do when a complication, mishap or failure occurs. If he does not he should not place or restore implants.

Lysyl oxidase propeptide (LOX-PP) inhibits oral cancer metastasis and tumor growth by interacting with stromal cell-derived factor 1 (SDF-1), syndecan-4 (SDC-4) and syndecan-1 (SDC-1)

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The lysyl oxidase propeptide (LOX-PP) is derived from pro-lysyl oxidase (Pro-LOX) by extracellular biosynthetic proteolysis. LOX-PP inhibits oral cancer xenograft tumor growth and metastasis. Data indicate that LOX-PP inhibits distant metastasis of UMSCC2 oral carcinoma tumor xenograft by inhibiting shedding of SDC-1 and -4 ectodomains via down-regulating Stromal cell-derived factor 1 (SDF-1) activity. LOX-PP also binds both SDC1 and -4 and inhibits binding of FGFR1 to its ligand and the downstream signaling in non-metastatic oral cancer line SCC9. LOX-PP binds to SDC4 and inhibits SDC-4 oligomerization and FGFR1/FGF2/SDC-4 complex formation via SDC-4 to FGF2 binding in SCC9 cell line. We demonstrated that, LOX-PP promotes the formation of SDC-4/syntenin/RhoGD11/RhoG complex/monomer. Therefore, dissociation of RhoG from RhoGD11 is suppressed and eventually Rac-1 activation and cell proliferation inhibited in SCC9 cells. We also demonstrate that the uptake for LOX-PP is SDC-4 dependent macro-pinocytosis and SDC-1 regulates uptake/recycling of LOX-PP in both UMSCC2 and SCC9 cell lines.

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