특강 II(Sepcial Lecture II)

Vertical ridge augmentation to improve aesthetics in implant restoration

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In the last few years the aesthetic result of the final prosthetic restoration has become one of the most fascinating challenge in implant dentistry. As a matter of fact, the implant position is now driven more by the prosthetic request than by the quantity and the morphology of the available bone.

The introduction of the biological concepts of Guided Bone Regeneration (GBR) in the last 10-15 years has determined a major improvement in the aesthetic outcomes.

A correct diagnosis based on a multidisciplinary approach, including periodontal, prosthetic and surgical parameters is crucial. The periodontal evaluation must consider different factors regarding the patient's periodontal health and anatomy like the periodontium bio-type, amount of cheratinized gingiva and mucosa, the height and the width of available bone. The prosthetic treatment planning has to consider cosmetics, phonetics and function.

The implant placement in a proper position is essential for at least four reasons: (1) the emerging profile of the final prosthetic restoration is influenced by the position of the implant; (2) a sufficient amount of bone must be maintained buccally, mesially and distally to the implant; (3) there must be a minimal discrepancy between the axis of the crown and the axis of the fixture; (4) A proper biological width must be respected.

Many studies reported high success rates using GBR techniques in the treatment of fenestrations, dehiscence, large per-implant bone defects, and in horizontal ridge augmentation.

The regenerative technique has been further improved with the introduction of more effective barrier membranes (with a CPTi foil reinforcement), osteoconductive biomaterials, and the development of new surgical procedures. This new techniques, allowing bone regeneration vertically in a coronal direction, determined a substantial improvement in the final aesthetic outcomes.

More recently, a new scalloped implant has been proposed to maintain a proper biological and a more physiological contour of the peri-implant hard and soft tissues.

All there techniques will be described during the lecture.

OBJECTIVES

Upon completion of this course the participants will be able to:

a) Recognize the anatomical determinants for proper diagnosis and treatment planning in aesthetic implant restoration.
b) Apply the principle of GBR to improve the implant sites.
c) Learn the techniques for horizontal and vertical ridge augmentation.
d) Learn how to use biomaterials in association with autogenous bone and membranes.
e) How to manage hard and soft tissues from a surgical and prosthetic point of view in order to improve the aesthetic.
f) How to place the implant in a proper position.
g) Learn surgical and prosthetic techniques for the use of the new Perfect scalloped implant in the upper frontal sites.

HIGHLIGHTS

Aesthetic implants, Guided Bone Regeneration, Biomaterials, Scalloped implants, Vertical bone regeneration, Prosthetic reconstruction .

CURRICULUM VITAE

Degree of Medicine and Surgery at the University of Milan in 1979

Specialization in Odontostomatology and Dental Prosthodontics at the University of Milan in 1982.

Professor and Co-Chairman with Prof. Maiorana of the Department of Periodontology and Implant Restoration at the Dental School of the University of Milan. Founder of the Italian Society of Osseointegration.

Active Member and Vice-President of the Italian Society of Periodontology (SidP) for the years 2003-2004.

Member of the Board of the European Association for Osseointegration (EAO) since 1998.. President of EAO for year 2001/2002 and 2002/2003.

Referee of the Journal of Clinical Periodontology.

He published several papers and is international lecturer about the topic Periodontology, Osseointegration and Ridge augmentation.