The research in dentistry

Last years have shown an important progress of the scientific research in the dentistry world: implants, CAD-CAM technology, guided surgery, biomaterials and tissue engineering. That technological revolution has brought for the last ten years a radical change in the setting of the treatment plans in dentistry.

In particular I like two aspects: the possibility to regenerate areas of soft or hard tissues in order to allow an ideal implant-prosthetic rehabilitation, and the possibility to perform surgery in a virtual world and then to transfer it to the patient, reducing both the error possibilities and the invasive treatments.

The recent Congress on stem cells organized by Tor Vergata University of Rome highlighted the potentialities of that research field. The peculiarity of stem cells - meaning their power to differentiate into different cell populations, and then their power to allow processes of tissue regeneration with high predictability - represents the best way to be followed in the future.

The istological studies on tissues regenerated, thanks to the use of stem cells, have shown some results which are superior to the ones which are reachable by using any other biomaterials. The future challenge will be trying to make accessible to many professionals that innovative technique through the simplification of the laboratory processes and the reduction of the management costs.

In the future the dental professionals will be obliged to have a strong basic scientific education and knowledge, possibly not only limited to the stomatognatic apparatus, in order to be able to actively follow the possible interesting research developments.

Cordially

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