

Anatomical Sciences in Dentistry

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Anatomy is crucial to both the textual and technical nature of the dental disciplines, particularly the maxillofacial surgery. Research design, hypothesis specification, causal inference, and the interpretation of research results in stomatological research require a thorough knowledge of anatomical sciences. In a research study, explaining the new understanding of the problem after taking the new results into consideration and the practical application of fundamental hypotheses posed can be accomplished in a most efficient way if precise anatomical comprehension is correlated.

Anatomical sciences play a vital role in the education and training of maxillofacial surgery as well as providing a basis for many programs in dentistry. The study of anatomical sciences from the molecular up to the gross level allows the development of a comprehensive understanding of how structures relate to function and how these might be affected in the disordered condition.

There have been ongoing debates about how much anatomy needs to be taught and how it should be taught [1, 2, 3, 4]. Involvement of the anatomical sciences, in a most profitable way should always be an emerging trend in the training of dental disciplines. Superiority in the anatomical sciences may facilitate the description and interpretation of the development, growth and aging processes. Research studies in experimental biology within the maxillofacial territory about these issues are so popular and promising.

The role of anatomical sciences in the assessment of myofascial pain, referred pain, neuro sensorial disturbances, trauma, arterio venous malformations and neo plastic diseases is considerable. The phenomenon of convergence between visceral and somatic sensory input is manifested clinically as referred pain.

So, the oral surgeon can neither acquire success in the interpretation of referred pain nor estimate the possible neuro sensorial disturbances without a broad understanding of neuro anatomy. Furthermore, the surgeon cannot assess the abnormalities, malformations, posttraumatic situations and neo plastic occurrences in case of lack of thorough knowledge in the anatomical sciences.

Epilogue: If anatomy is fairly well established in mind of the dental practitioner, it is quite possible to be able to avoid the worst consequences and even profit from the situation during a challenging surgical operation or a prosthetic rehabilitation. This possibility is the golden key of success in painstaking researches. It would be advisable to keep in mind the saying of the famous German anatomist Friedrich Tiedemann (1781-1861): “Ärzte ohne Anatomie sind Maulwürfen gleich: sie arbeiten im Dunkeln, und ihrer Hände Tagewerk sind Erdhügel”. which translates into “Doctors without anatomy are similar to moles: they work in the dark and their daily tasks are mole hills” [5].

References:

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