

Artificial intelligence, 5G and orthodontics

In the last fifteen years, the world has seen massive advancement in technology and it has also impacted dentistry. Orthodontics has not remained distant from technological improvements. Virtual Reality, laser technology, 3D printing has totally changed the scope of orthodontic diagnosis and treatment planning. In my view the next big thing in dentistry including orthodontics will be the use of artificial intelligence along with 5G in diagnostics and treatment planning. In fact, the bright future with artificial intelligence has already arrived in Pakistan with a company like “DentiNect”.

The orthodontic appliances have been evolving from the past. The science of orthodontics is going through continuous advancement of technology, artificial intelligence and machine learning. 3D printed “ClearPath” aligners in Pakistan and beyond are being used to treat orthodontic cases effectively.

Neural networks can teach themselves to identify patterns without being taught what one is looking for. This ability of artificial intelligence has found multiple applications especially in virtual industry. The internet giant “Google” uses these algorithms to detect everything from minor to major in pictures in order to make their images. Apple uses deep learning to make its artificial assistant, Siri®, better able to recognize human voices. Deep learning is already better than doctors in family medicine, skin cancer and heart attack detection, among other medical applications. Dentistry will soon bring in different dimensions of learning and patient care with the advancements of artificial intelligence and 5G. Dental practices and institutions should be thinking at this point of time to invest in a robust IT department in order to incorporate the future advances in technology associated to the medical and dental profession.

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