Digital Diagnostics and Therapeutics

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ABSTRACT

Information technology (IT) has much to offer for the healthcare. Healthcare IT covers a broad range of computer and technological advancement used in its environments and tools such as electronic health records (EHR), laboratory and medical imaging information systems, use of dedicated medical devices and facilitation of healthcare communication. It also supports the diagnostic ability for the healthcare members and enhance treatment deliveries reflecting patient-centered approach.

However, despite vast challenges involve in the development and maintenance of these complex systems as a platform to hold enormous clinical and diagnostic information for huge number of patients, very little of these captured data are involved in the entire aspect of surgical diagnostics and therapeutics. In most clinical situations, it merely serves for record keeping with minimal involvement in shaping the surgical workflow, perioperative clinical decision making or to enhance surgical deliveries. The aim of this presentation was to highlight our institutional experience with the utilization of various advance digital diagnostics and therapeutic software and tools for surgical management of jaw tumors and maxillofacial fracture reconstruction, with emphasis on orbital blowout fracture reconstruction. Bridging and personalized diagnostic procedures for therapeutic or surgical use, pre-procedural or virtual planning, image-guided surgery and perioperative surgical control and check with the use of computer technology will be highlighted in this presentation. It is hoped that this presentation could serve as sharing and learning platform for all conference delegates with regards to the revolutionary digital diagnostic and therapeutic trends in some aspect of oral and maxillofacial surgical procedures.