Applications of telemedicine in dermatology and dermatopathology

Two of the applications of digitized medicine as applied to the dermatology are poised to change the practice as we know it today, namely teledermatology and teledermatopathology. The implementation of teledermatology has seen a huge interest, especially when applied with the patient in mind. Some business models have focused on delivery of the care to the underserved areas (areas without adequate dermatology coverage) and others have been implemented as patient initiated consultations. However, if the biopsies are done, it is questionable where does the pathology end up and who is actually reading the biopsies, potentially skewing the interpretation and allowing for a diagnostic bias. On the other hand, although well accepted and utilized, conventional dermatopathology workflow is not ideal, especially if viewed in light of the increasing demands in terms of reporting, turnaround time and patient safety. Implementation of telepathology in any surrounding is a challenge, though, as most pathologists trained to use current systems are comfortable with standard, glass based pathology and are resistant to adopting new approaches to workflow without evidence of an immediate benefit. Furthermore, telepathology has not been adequately explored for evaluation of specific diagnostic features in dermatopathology, which is often a single person operation, thus not allowing for additional opinion or real time quality assurance. By employing telepathology, real time remote case review and delayed image review as well as second opinions, additional subspecialty reviews, sign out collaborations and expert reviews can be easily conducted. In some cases, this is the only way these imperative procedures can be accomplished, especially considering their time sensitive nature. In the future, one would hope to see a combined teledermatology/teledermatopathology system for delivery of the optimal care for a dermatologic patient.

Biography

Drazen M Jukic is a private practice Dermatopathologist in Savannah GA. He maintains active digital Dermatopathology consultation service and serves as a Teledermatopathology Consultant for VISN 8 and James A. Haley VA Hospital, Tampa, Florida and is a Member of Advisory Board of Castle Biosciences, Inc. He also maintains a consultation service via his company Advanced Digital Anatomic Pathology Technologies (ADAPT) and as a Medical Officer in Digipath, Inc. In the past, he served as a Director of dermatopathology fellowship, University of Pittsburgh (for 10 years), Medical Advisory Board at Digipath and was a Founding Member of a clinical team at Omnyx, LLC. He is a Visiting Associate Professor, School of Medicine of University of Zagreb, Croatia. His area of expertise includes immunohistochemistry, cutaneous lymphomas and molecular pathology as it pertains to dermatopathology.

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