

## Telepathology in emerging countries, practical experience between Italy and Egypt

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Telepathology is the practice of pathology at distance viewing images on a monitor rather than directly through a light microscope. Telepathology Technologies included Static & Dynamic forms. This technology can be used in: Primary diagnosis, Second opinion, Quality assurance, Proficiency testing & Distance learning.

To create a telemedicine channel between Italy & Egypt we began by signing a protocol of cooperation between the CIVICO hospital in Palermo & The Italian Hospital in Cairo and training of the IT-manager of the Italian Hospital in Cairo in Palermo for two weeks. Our project was divided into four phases: Telepathology, Tele-echocardiography, Tele-radiology & Tele-Endoscopy.

For the First phase [Telepathology], We evaluated of the costs and find a fund for this, searched for the best instruments in the Egyptian market with the highest qualifications, downloaded the same software that was used in Pittsburg and Palermo and began of the connection.



The needs of this project for a complete set were: a suitable place, A server for a high-speed internet connection, A full computer set: P IV computer, Scanner & Printer, a binuclear microscope, a digital camera for gross pathology, a digital Camera, connected to the microscope for capture images from the microscope, a video-camera connected to the computer for video-conferences and a suitable software for image processing and image transferring to internet. The personnel needed for the project were a pathology team on each side of the connection and an IT-manager on each side of the connection.

This useful technology allowed us to do Histopathological slide consultation with the

pathologists in Palermo or Pittsburg, Video-conferences for life-show examination of the slides with possible discussion and Video-conferences for discussing cases, teaching courses [E-learning]. We offer these services any pathology department in the Egyptian universities and any research center.



Practically, the benefits of Telepathology were: better medical service, more specialization, saving money, saving time, teaching and learning and exchange knowledge. Since the beginning of our telepathology program, many cases were consulted with the pathologists in Palermo and Pittsburgh

The next phases of our project are Tele-echocardiography, Tele-radiology and Tele-endoscopy.

We hope in the future to extend this useful service to remote areas in Egypt like Sharm El Sheikh & Aswan and to create a telemedicine network between Italy and all the Italian hospitals outside Italy.

