First Experience in International Teleconsultation in Cardiovascular Pathology

BACKGROUND: Telepathology uses telecommunication technologies to transfer images, clinical and anamnestic data to specialized centers particularly for teleconsultation and continuous education. Remote consultation via e-mail can be used for so-called store-and-forward telemedicine. The pathologist is in a position to make maximum use of the potential of Internet for transmitting both texts and images from one end of globe to the other.

MATERIAL AND METHODS: The selected histological images of two cases: Aortal cystic medial necrosis and Benign metastasizing leiomyoma. (H&E, elastin van Gieson. Masson trichrome and immunostains) at various levels of resolution were prepared in the Department of Pathology of the Institute of cardiovascular diseases of Clinical Center of Serbia. The colored images were prepared in the Department of Pathology of Clinical Center "Bezanijska Kosa" by CCD color video camera installed on a LEICA Q500win system for image analysis. The captured image files were converted into compressed JPEG format and attached to e-mail messages, which contained patients' information and sent through the Internet to the Department of Pathology, Thoraxklinik, Heidelberg, Germany, for telepathology consultation and interpretation.

RESULTS: In our cases telepathology consultation by ordinary e-mail was useful and successful. No additional photos were requested. There was diagnostic concordance between original and telepathological main diagnosis.

CONCLUSION: Our first results estimate usefulness of international consultation by e-mail.

KEY WORDS: Telemedicine, Telepathology; Second opinion; E-mail teleconsultation