Telepathology: diagnostic aid, second medical opinion and validation of the diagnostic efficiency.

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Abstract
Telepathology is a dynamic system based at the sharing of medical images coming from the microscopy that comprehends several applications. The first step of the study was evaluating the accuracy diagnostic; similar to test the proposal validity of multimedia cases transmission, as well as validating the advantages and disadvantages of the application. The experimentation involved the transmission of 619 cases, which had been realized between two laboratories of Pathological Anatomy in Santa Catarina, Brazil, intending to prove the validity of the telepathological study as a tool of second medical opinion.

Introduction
Telepathology is applied to the anatomic pathology and that associates knowledge of computer science and telecommunication resources understanding multiple differences applications. The telediagnostic is the most important of these tasks in the direction to satisfy mainly, the two diagnostic necessities of the doctor, that are: the telediagnostic of frozen section and second opinion. The advantages and disadvantages of the telepathology as diagnostic tool says respect comment of human factors related to the interaction of the pathologist doctor with the equipment present in the work station of the telepathology. It would compete investigating cases with a degree of increasing difficulty and sufficient specificity.

Metodology
The collection of data was made through the database of CEDAP Lab in Joinville-SC, Brazil, gotten through telepathology sections between 2 Anatomic Pathology Lab in Santa Catarina; in a 2 years period. In a total of 619 cases. The criteria of inclusion, was chronic inflammation and malignance (primary or metastatic). The studied was sending the images and, at least two senior pathologists receiving the images using real time shared telepathology, interpreting histological data visualized on a computer monitor. In the meeting, the doctor discusses itch case, by voice, video and streaming videos. The images were transmitted by a camera, connected to the microscopy, captured to a computer, and transmitted online to other doctors by the IP address.

Results
This demonstrating that the relevance of the rightness is great, representing 99.5% inside of the boarded area. Amongst the most studied illnesses, the most relevant presented high degree of malignant (44%). From these comments perceived that: the average time required to diagnosis small specimens, such as biopsy, was of 8 minutes (scales 4-14) and for bigger specimens, 22 minutes (10-45 scales).

Conclusão
The dynamic telepathology is a useful and convenient diagnosis and a second associate opinion in the practical of the pathological anatomy routine of confirmation of the malignant or difficult sections. In such a way, by means of the displayed data, The telepathology and the traditional diagnostics of the compilation had agreed to 99.5% of the cases, but the telepathology has a delay up to 10 times more than the traditional examination.

References