First Publication

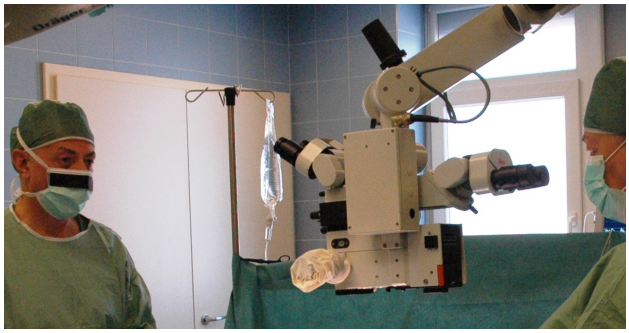
PANNON-PALATINUS

News - Topic

New paths of micro surgery

(assisted IR control)

Following several years of research and preparatory work - on 11. June 2010. - an international medical team successfully applied the surgical technique assisted by IR radiation. European medical professors raised the issue that the imaging feedback of direct dynamic physiological processes was not provided. The primary imaging equipment of micro surgery is the microscope.



Almost without exception, all medical imaging systems indicate anatomical formula changes, thus display morphology.

In micro surgery, XR (X-Ray), Scintigraphy (isotope diagnostics) and Ultra Sound imaging may not be directly applied during surgical interventions. However, possible special equipment would not be able to monitor the bio-chemical, bio-physical changes of dynamic processes.

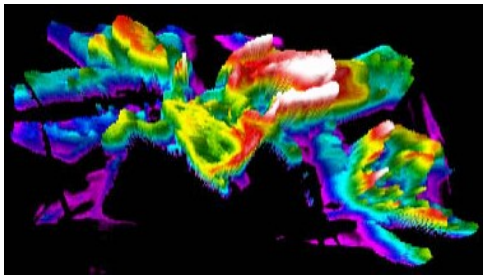
In the case of several surgeries, the changes indicated by physiological processes would be a significant source of information. On this basis, only technology meeting the main requirement may be applied.

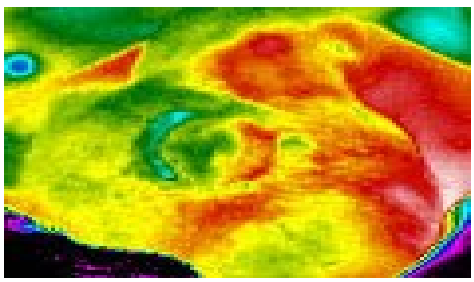
These main requirements are the below: - High speed imaging (925.000 shots were taken); – A non-invasive equipment without a signal device; - Direct display feedback and trackback; - High resolution; - Direct dynamic physiological, metabolic and occasionally morphological feedback; - Wide spectrum mapping; - The programming and immediate controlling of surgeries; - The control of the arising pharmacokinetics; - High level of documentation; - The modeling and continuous monitoring of healing and rehabilitation processes; - The option of macro imaging; - The capacity of adding any preferred imaging formation.

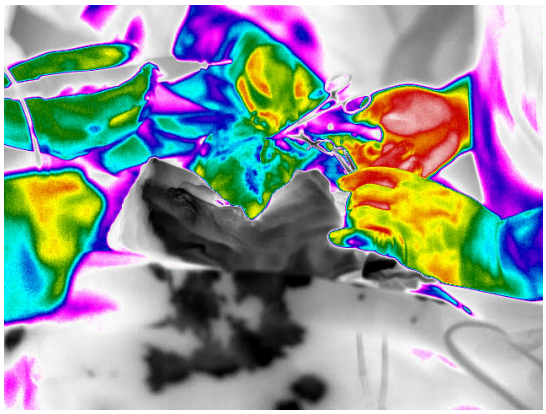
According to our information, the technology thoroughly met the precursory requirements.

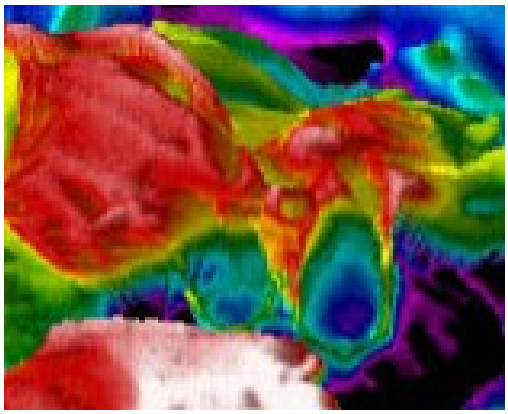
Following the processing of the scientific assessment and the documentation, the technology will be discussed in several publications. We hope that www.pannonpalatinus.hu could have a future role in the publication.

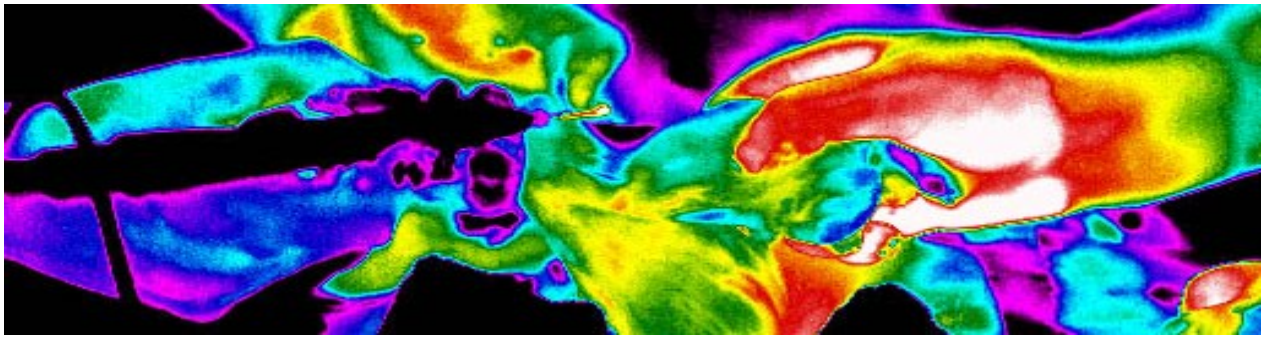
Dynamic sample IR images:

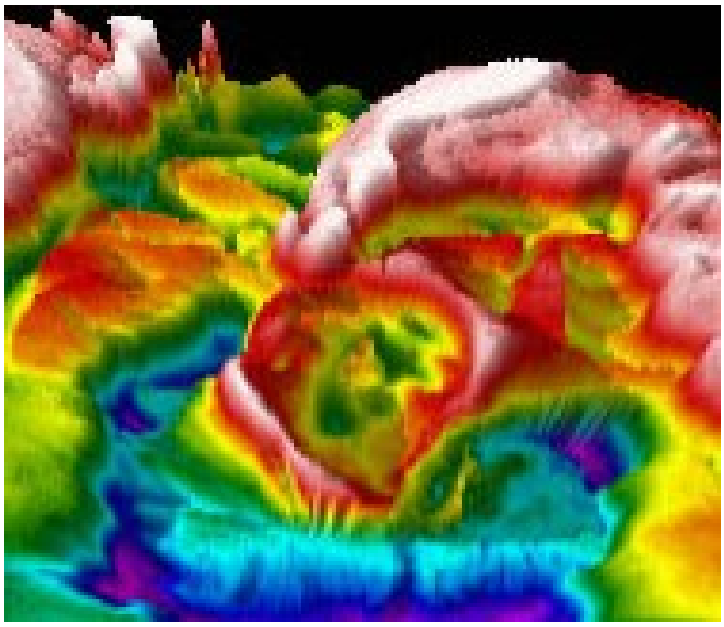












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