

A TRIAL ON AN UPDATED SET OF QUALITY CRITERIA FOR CARDIAC IMAGES

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An updated and simplified set of quality criteria for coronary angiography images was developed by the SENTINEL Cardiac Group as to be used for an objective evaluation of the angiograms. In addition to that a software tool allowing an automatic computational score to be made was designed to quickly assess the image quality content of a sample of coronary angiography images collected in most of SENTINEL partner cardiac centres.

Within this context three experienced cardiologists from France, Italy, and Poland were involved in a trial dealing with the evaluation of 30 coronary angiography studies performed in eight countries (Italy, Belgium, Bulgaria, Cyprus, Luxembourg, Romania, Slovak and Spain) through the developed set of quality criteria and the corresponding scoring system.

All the assessed images were displayed on the same workstation similar to that currently used in the clinical routine practice, all the considered studies were performed on digital cardiac angiographic systems and archived in DICOM format on CD-ROM for the distribution among centres.

The objectives of this trial were: (i) to validate the quality criteria methodology as a quality assurance tool to be used when assessing the quality of a cardiac angiographic study, (ii) to assess the practicability of the developed software tool as well as of the relevance of the adopted scoring system for the evaluation of the cine-angiograms, (iii) to evaluate the overall quality of a sample of cardiac images collected in 10 European cardiology centres and identify the differences among the observed practices considering the use of digital flat panel imaging technology, (iv) to validate a set of technical criteria to be proposed for the optimisation of patient and staff exposure in cardiac imaging.

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