

IS DIGITAL BETTER IN DENTAL RADIOGRAPHY?

Urban Zdešar

Institute of Occupational Safety, Ljubljana, Slovenia

Dental radiography was the first field of projection x-ray imaging using digital detectors in Slovenia. First digital systems based on CCD technology were installed in 1992 and 1993. Current legislation in Slovenia requires an annual technical testing of each x-ray installation, including dental. Analysis based on annual test results was performed to compare digital systems to film based ones.

At the moment around 30% of intraoral dental x-ray units use digital detectors. Survey results show significantly lower doses of digital systems. It should be noted that in the survey quality of images was not taken into account. Instead we relied on judgement of each dentist that images were suitable for the purpose. In the future we plan to upgrade the testing with some image quality estimation using phantoms.

To our opinion digital system are especially suitable for users with low number of x-ray examinations (for example private dentists), because of problems that may arise due to developing only small number of films. The problem with digital systems could be the ease of deleting an image and performing another examination. The extent of it was not investigated.

E-mail presenting author:

urban.zdesar@zvd.si