the diagnostic and image quality of the radiographs retrieved over a virtual desktop application and a network computer.

Study Design: A total of 15 intraoral and 5 panoramic deidentified radiographs selected for this study showed a variety of common dental conditions and anatomic landmarks. Assessments were performed on a desktop computer and a tablet computer 10.5-Inch iPad Pro. All radiographs were retrieved on MiPACS and a virtual desktop application, Citrix Receiver. Each radiograph was assigned a case number and only a specific tooth was marked for diagnostic assessment. A total of 240 radiographs were assessed for general dental conditions and anatomic landmarks on panoramic radiographs.

Results: Cohen's kappa was calculated and the kappa value ranged from 0.79 to 0.89, which indicated good to very good agreement between raters. A Kruskal-Wallis H test was performed, and distributions of identification of caries, caries surfaces, bone loss, and presence of periapical lesions were similar for all groups. Median scores were not statistically significantly different between groups as below ($P > .05$).

Discussion/Conclusions: IPad and LED monitor display performed equally on their ability to diagnose common dental conditions. In addition, there were no statistically significant differences between the diagnostic ability of dentists examining images retrieved over a virtual desktop application (Remote electronic health record [EHR]) and a network desktop computer.

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DIAGNOSTIC ULTRASOUND ASSESSMENT OF TEMPOROMANDIBULAR JOINTS: A SYSTEMATIC REVIEW.

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Background: Diagnostic imaging is an essential part of the evaluation of temporomandibular disorder (TMD). Magnetic resonance imaging is accepted as the reference standard for imaging diagnosis of TMD and cone beam computed tomography (CBCT) has been the method of choice to evaluate the contours of the cortical bone and TMD osseous alterations. Although not in general clinical use, several studies have assessed ultrasound to evaluate TMJ alterations. This nonionizing imaging method is less expensive and transportable and can be easily used in a dental setting.

Objective(s): The purpose of this systematic review was to determine the diagnostic capability of ultrasound to assess TMJ alterations as disk displacement, joint effusion, and condylar changes using 3-D imaging modalities as the reference standard.

Study Design: Studies of this systematic review were gathered by searching several electronic databases and partial gray literature up to January 8, 2018, without restrictions of language and time. The risk of bias was evaluated using the second version of Quality Assessment Tool for Diagnostic of Accuracy Studies-2 (QUADAS-2). The grading of Recommendation, Assessment, Development and Evaluation (GRADEpro system) instrument was applied to assess the level of evidence across the studies.

Results: After applying the eligibility criteria, 28 studies were identified and synthesized. All studies were methodologically acceptable, presenting low applicability concerns, although none of them fulfilled all QUADAS-2 criteria. The quantitative analysis included 22 studies reporting on 2829 joints in total. The quality of the evidence evaluated by GRADE system suggested moderate confidence in estimating the outcomes.

Discussion/Conclusions: This systematic review demonstrated that US has acceptable capability to screen for disk displacement and joint effusion in patients with TMD, but not to assess condylar changes. More advanced imaging, such as magnetic resonance imaging, can thereafter be used to confirm the diagnosis, if deemed necessary.

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