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TELEDENTISTRY EXAMINATION AFTER SURGICAL EXTRACTION OF THIRD MOLARS

Kosta Todorović^{1,2}, Milan Miladinović³, Filip Djordjević³, Danijela Staletović³, Simon Nikolić⁴, Marko Matvijenko⁵, Rastko Ivković^{5,6}, Zdenka Stojanović⁷

One of the most commonly performed surgical interventions in dentistry is the third molar extraction. This procedure may be performed routinely, but it may also be associated with complications. Numerous variations in the postoperative course have been described. Our investigation aimed to examine the reliability of postoperative follow-up of surgical third molar extraction using the method of teledentistry via patients' smartphone devices.

We performed a randomized experimental study. The follow-up examination undertaken a day after the surgical procedure consisted of two parts: a virtual one and an in-person one. Our digital examination involved photographs taken by the patients themselves and an electronic survey. The oral surgeon first evaluated the digital follow-up results before conducting the patient in-person examination. The results were processed and compared using Cohen's kappa coefficient, Z test and McNemar's χ^2 test for the statistical significance cut-off value of p = 0.05.

In total, 40 follow-up examinations (100%) were performed. In 39 (98%) examinations, the results obtained with in-person and virtual approaches were identical. In 7 cases (25%), the indications for a change in therapy were presented by both methods. The actual number of therapy changes recommended was 10 (100%) for the in-person approach and 9 (100%) for the teledentistry method. The following agreement values were obtained: sensitivity: 0.9750; specificity: 0.9750; efficiency: 0.9750; and Cohen's Kappa: 0.9500. These values suggested an almost perfect agreement.

The diagnostic differences between patient recovery follow-up using the virtual and in-person approaches after third molar surgical extraction were not statistically significant. In that regard, postoperative course follow-up may rely on contemporary digital communication technologies with a high degree of confidence.

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