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CLINICAL RESEARCH – SURGERY

Validation of SAC Assessment Tool

Analysis of surgical cases for dental implant placement

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Results

Abstract

BACKGROUND: SAC Assessment Tool was developed with the goal to supply specialized support to clinicians during their decisions on oral rehabilitations with dental implants.

AIM: to evaluate and validate the SAC Tool in the assessment of the surgical part of an oral rehabilitation with dental implants.

MATERIAL AND METHODS: 30 partial edentulous patients, randomly selected, Prosthodontics Department of a University Dental Clinic. Clinical records, study models, intra and extra-oral photos and panoramic radiographies were obtained. 104 edentulous areas were identified. Analysis with and without SAC Assessment Tool by an experienced Implantologist (Gold-Standard) and three "Dentists" with some clinical experience. Statistical agreement test Fleiss Kappa to calculate agreement rate inter-classes.

RESULTATS: K value by "Gold-Standard" with and without SAC was 0,719 (moderate). Between "Dentists" 1, 2 and 3, K value was 0,303 (slight). When using SAC Tool, "Dentists" achieved similar results when comparing agreement with "Gold-Standard" (without the SAC tool) with values between 0,302-0,380 (slight). When comparing use of SAC Tool by both "Gold-Standard" and "Dentists 1, 2 and 3", results increased to 0,505-0,629 (moderate/substantial).

CONCLUSIONS AND CLINICAL IMPLICATIONS:

- SAC Assessment Tool helps in the analysis of clinical surgical cases, by standardizing its evaluation between less and more experienced Dentists.
- This tool doesn't seem to improve the results of an experienced Implantologist.

	statistical agreement test Fleiss Kappa
"Gold-standard" vs "Gold-standard" SAC	0,719
Av.1 <i>vs</i> Av.2 <i>vs</i> Av.3	0,303
Av.1 <i>vs</i> Av.1 (SAC)	0,527
Av.2 <i>vs</i> Av.2 (SAC)	0,39
Av.3 <i>vs</i> Av.3 (SAC)	0,551
Av.1 <i>vs</i> Av.2 <i>vs</i> Av.3 (SAC)	0,551
"Gold-standard" vs Av.1	0,38
"Gold-standard" vs Av.2	0,284
"Gold-standard" vs Av.3	0,323
"Gold-standard" vs Av.1 (SAC)	0,302
"Gold-standard" vs Av.2 (SAC)	0,38
"Gold-standard" vs Av.3 (SAC)	0,369
"Gold-standard" (SAC) vs Av.1 (SAC)	0,505
"Gold-standard" (SAC) vs Av.2 (SAC)	0,629
<i>"Gold-standard"</i> (SAC) <i>vs</i> Av.3 (SAC)	0,533



Background and Aim

SAC Assessment Tool

- ✓ Specialized support to clinicians during their decisions on oral rehabilitations with dental implants.
- \checkmark Identifies degree of complexity and potential risk.

AIM: to evaluate and validate SAC Tool in the assessment of the surgical part of an oral rehabilitation with dental implants.

Methods and Materials

- 30 partial edentulous patients = 104 edentulous areas.
- Clinical records, study models, intra and extra-oral photos and panoramic radiographies.
- Analysis: with and without SAC Assessment Tool.
- Experienced Implantologist "Gold-standard" vs Three "Dentists" with some clinical experience.
- Agreement rate inter-classes test Fleiss Kappa.

 Dawson, A. and Chen, S. (2010). The SAC Classification in Implant Dentistry. Berlin: Quintessenz Verlag.

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Conclusion

Higher agreement between 'Dentists' and 'Gold-Standard' using SAC Assessment Tool, meaning that it helps in the analysis of surgical cases, by standardizing its evaluation.

This tool doesn't seem to improve the results of experienced Implantologist, since the highest value obtained was in "Gold-Standard" without SAC.

References