

Indiana University School of Dentistry Oral health Research Institute IN / USA

Table 1

Evaluation of the Cytotoxic effect of the extracts of the Co-Cr-Ta, Alloy "Rex CC"
Using the Agar Diffusion Method

(48-hour Data)

Group*	<u>Decolorization Zone</u>		<u>Cell Lysis</u>		Cell	Cytotoxicity
	Diameter cm ^b	Index	%	Index	Response	
Negative Control ^a	0	0	0	0	0/0	None
Alloy extracts	0	0	0	0	0/0	None
Positive Control	3.0	4	35	2		

^a Negative control: filter disk with physiologic saline solution.

Positive control: filter disk with phenol.

^b N=4. The distance from the sample (cm) The value of 3.0 cm indicates a decolorization of the entire culture well (3.5 cm in diameter) Decolorization index is 1 if the decolorization Zone is limited to the area under the sample (Appendix A).

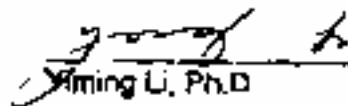
Conclusion

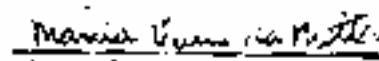
The extracts of Co-Cr-Ta "Rex CC" are not cytotoxic as evaluated using the agar diffusion method.

References

The test was conducted following the procedures specified in ISO 10993-5 DIN Document No. 13930 and the proposed ISO CD TR 7405.

International Organization for Standardization (ISO) (1992) International Standard Biological Evaluation of Medical Devices - Part 5: Test for Cytotoxicity *in vitro* Methods. ISO 10993-5. International Organization for Standardization (ISO) (1997) Dentistry-preclinical evaluation of biocompatibility of medical devices used in dentistry - Test methods for dental materials ISO 7405


Ximing Li, Ph.D


Marcia Motta, DDS, MS.

June 8, 1995
Date