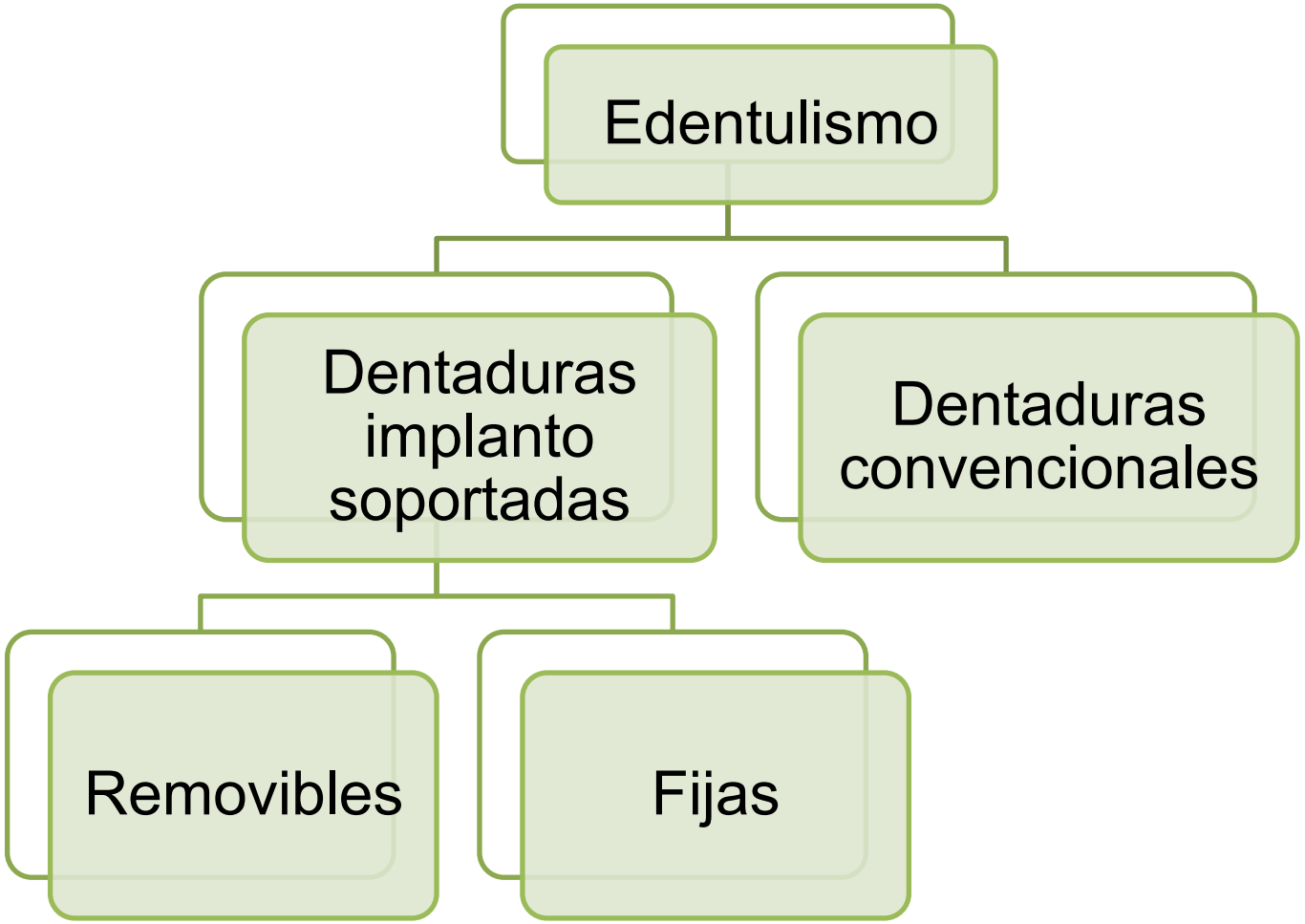
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Colegio Odontológico

“Adaptación marginal de una estructura metálica para protesis híbrida modificada cementada a interfases de titanio”

Daniel F. Córdoba, Mónica A. Cucuyame, Sorany Díaz, Diana M. López, Oskar E. Ortiz, Valeria Restrepo.

Rafael Murgueitio, Adriana Jaramillo, Carlos H. Martínez, Julián Tamayo.

Introducción



Gallucci G, et al. Int J Oral Maxillofac Implants . 2017;31:192–7

Adell R, et al.Int J Oral Surg . 1981 Dec ;10(6):387–416

Babbush CA. Int Dent J . 1985 Dec 35(4):266–76

Nogueira TE, et al. Trials. 2016 Dec 4 ;17(1):533.





Fotos Cortesía Dr. Rafael Murgueitio

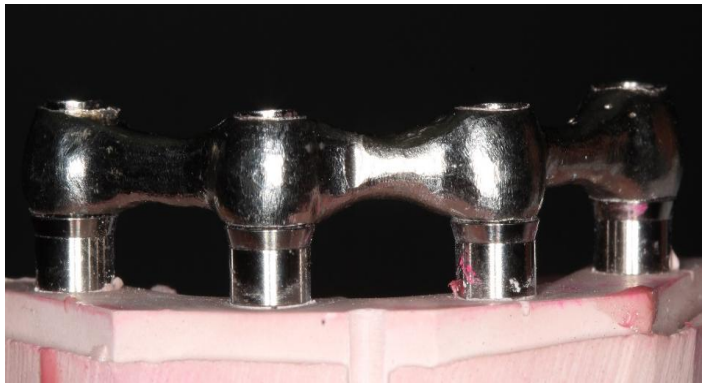
Pregunta de investigación

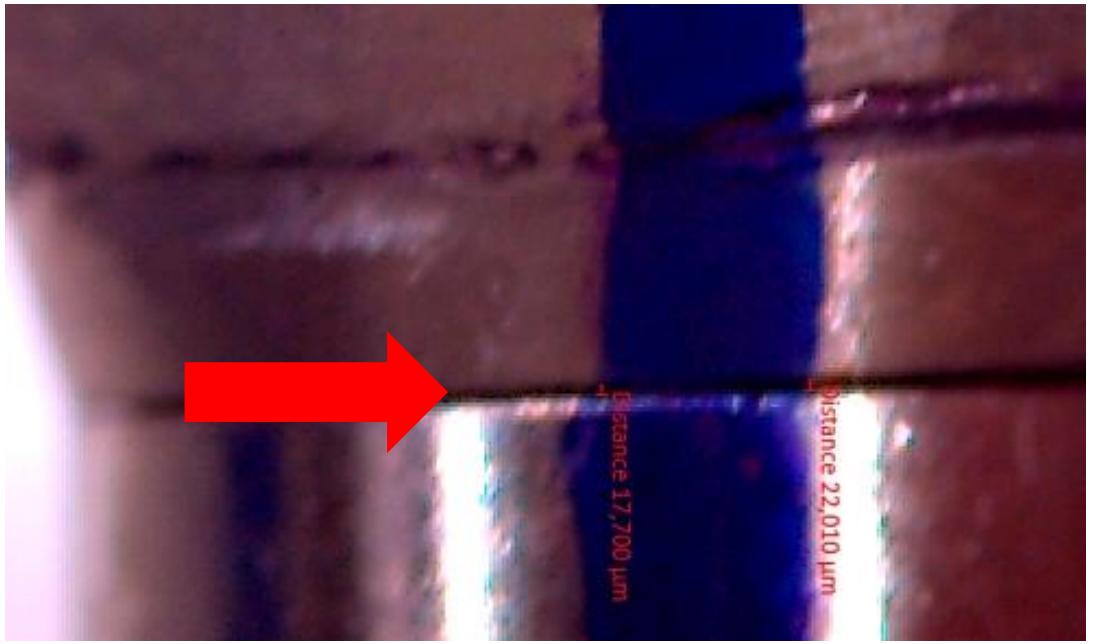


- ¿Cuáles son los valores de la adaptación marginal vertical de estructuras metálicas para prótesis hibridas modificadas cementadas a interfases de titanio?

Objetivo

- Medir la adaptación marginal vertical de la estructura metálica para prótesis híbridas modificadas, cementadas a cilindros de titanio convertidos a interfases o tibases y atornilladas a pilares intermedios (transepiteliales), conocidos comercialmente como multiunits.





Materiales y métodos

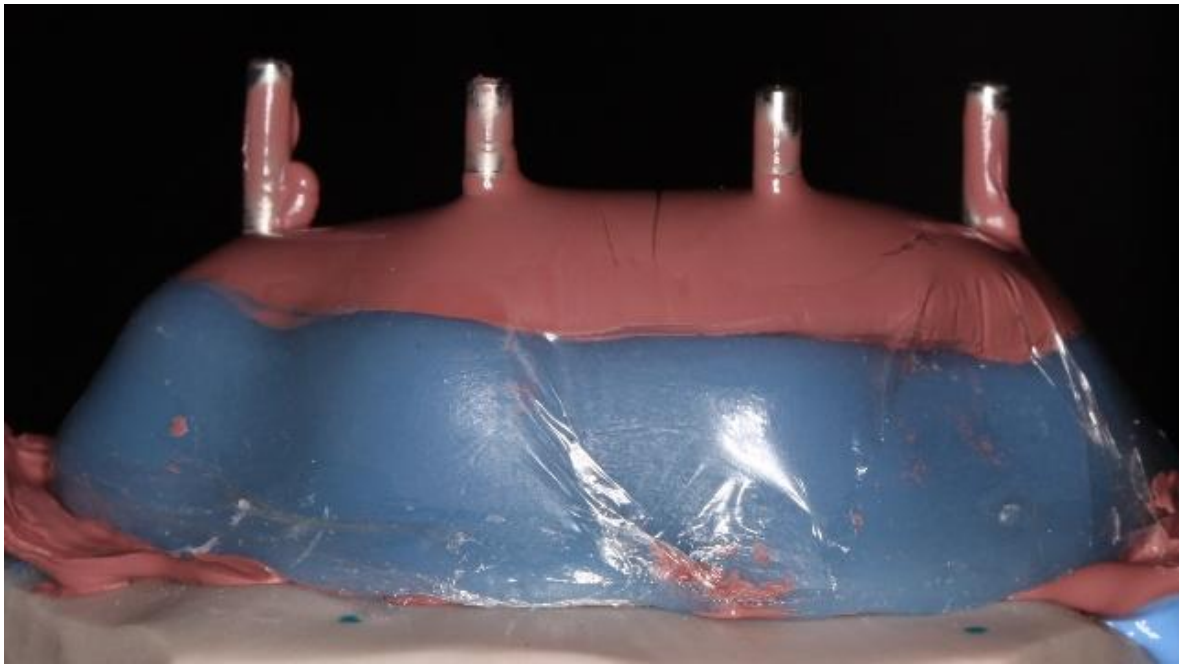
Estudio de laboratorio- observacional-descriptivo

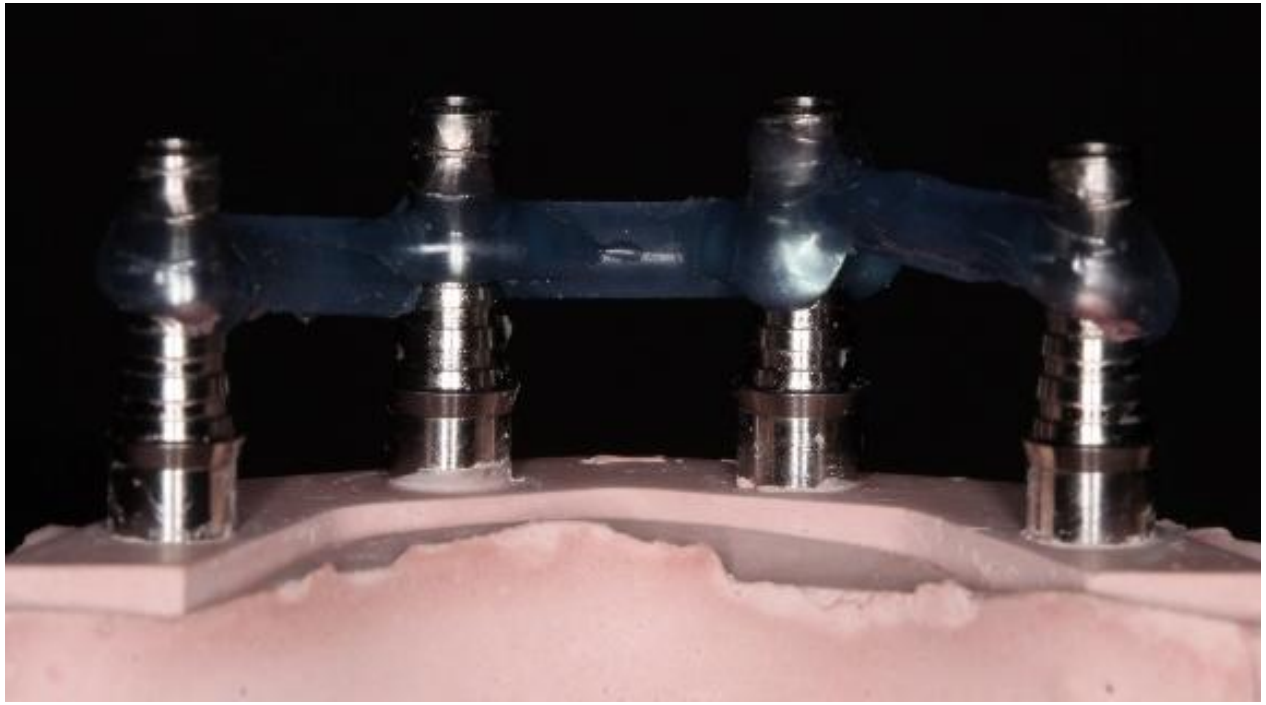
Materiales y métodos



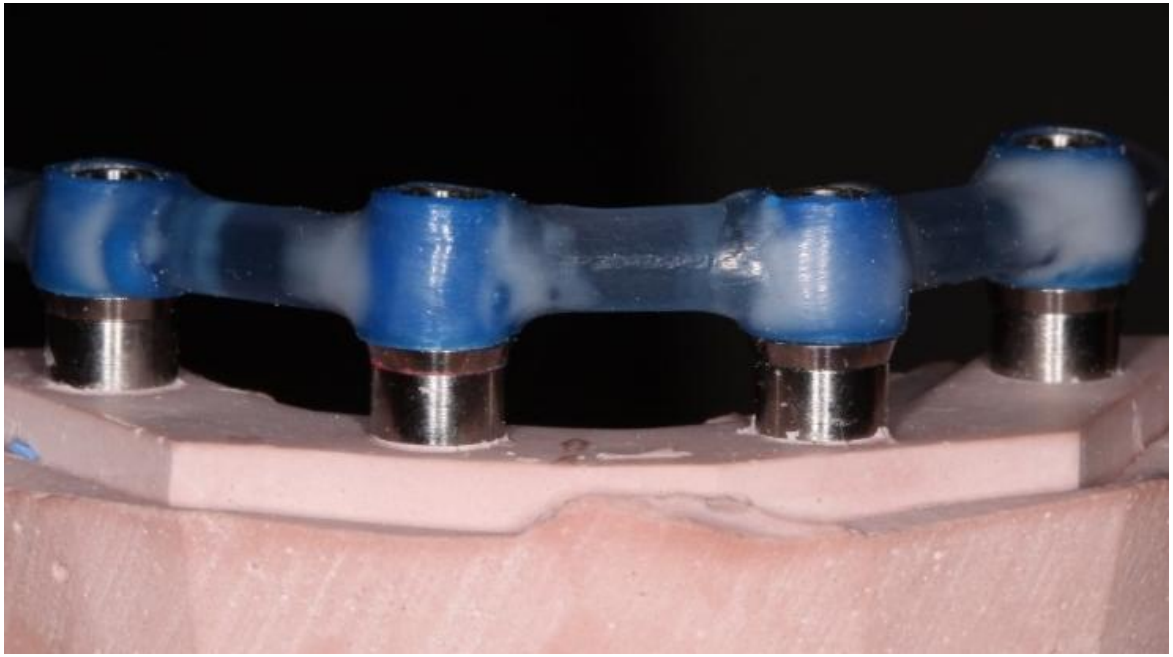






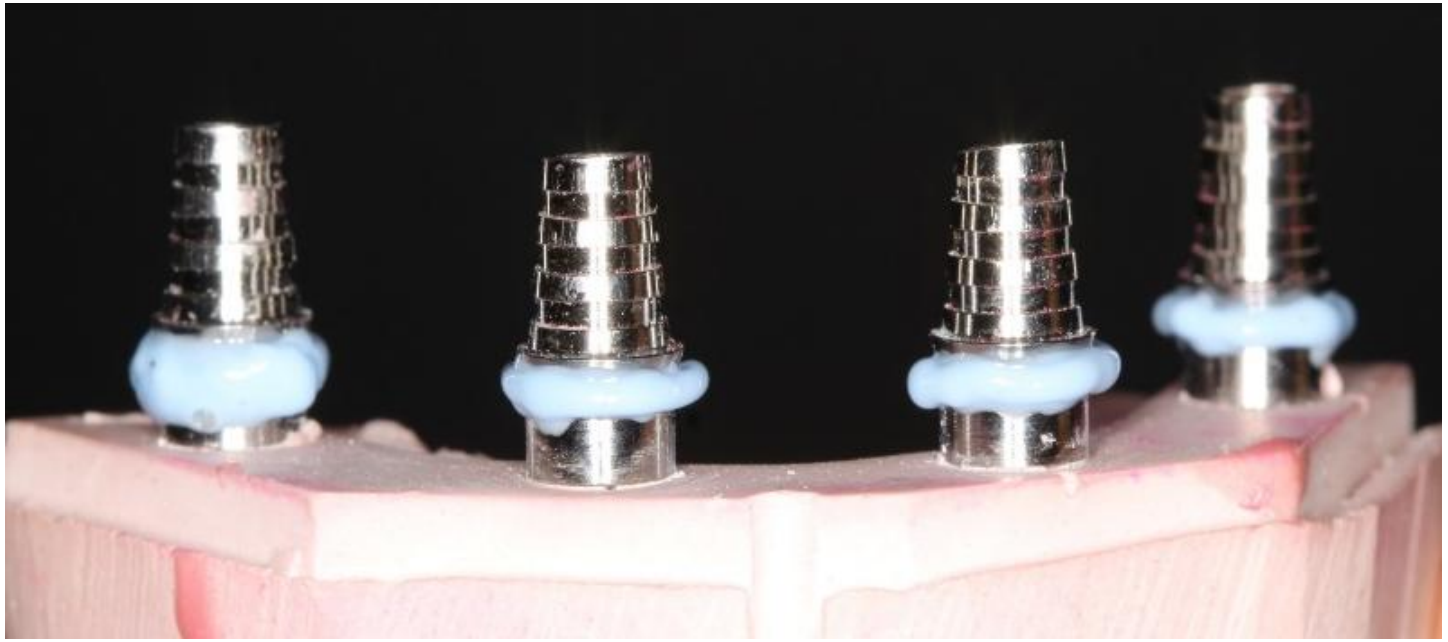




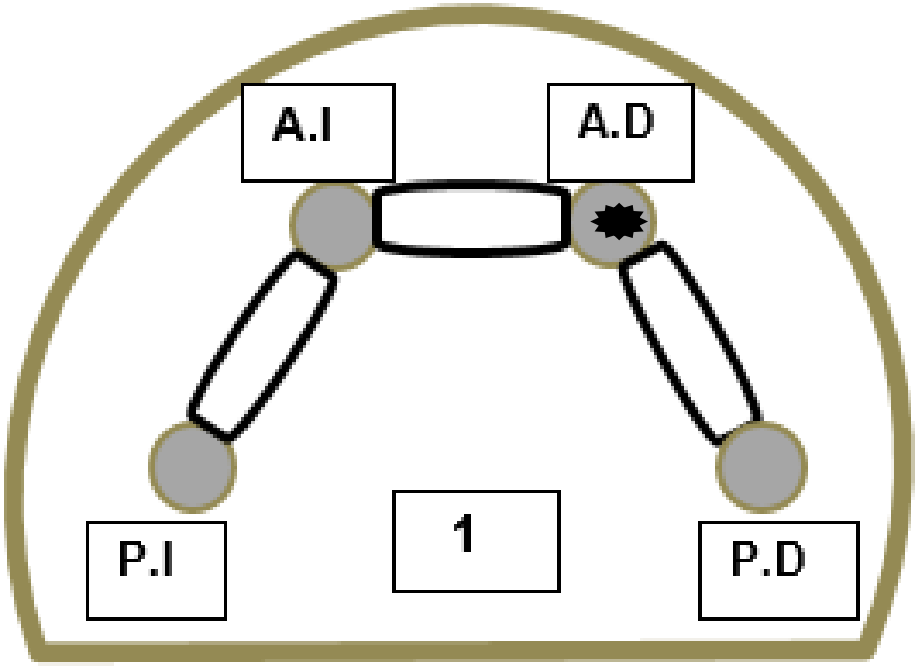




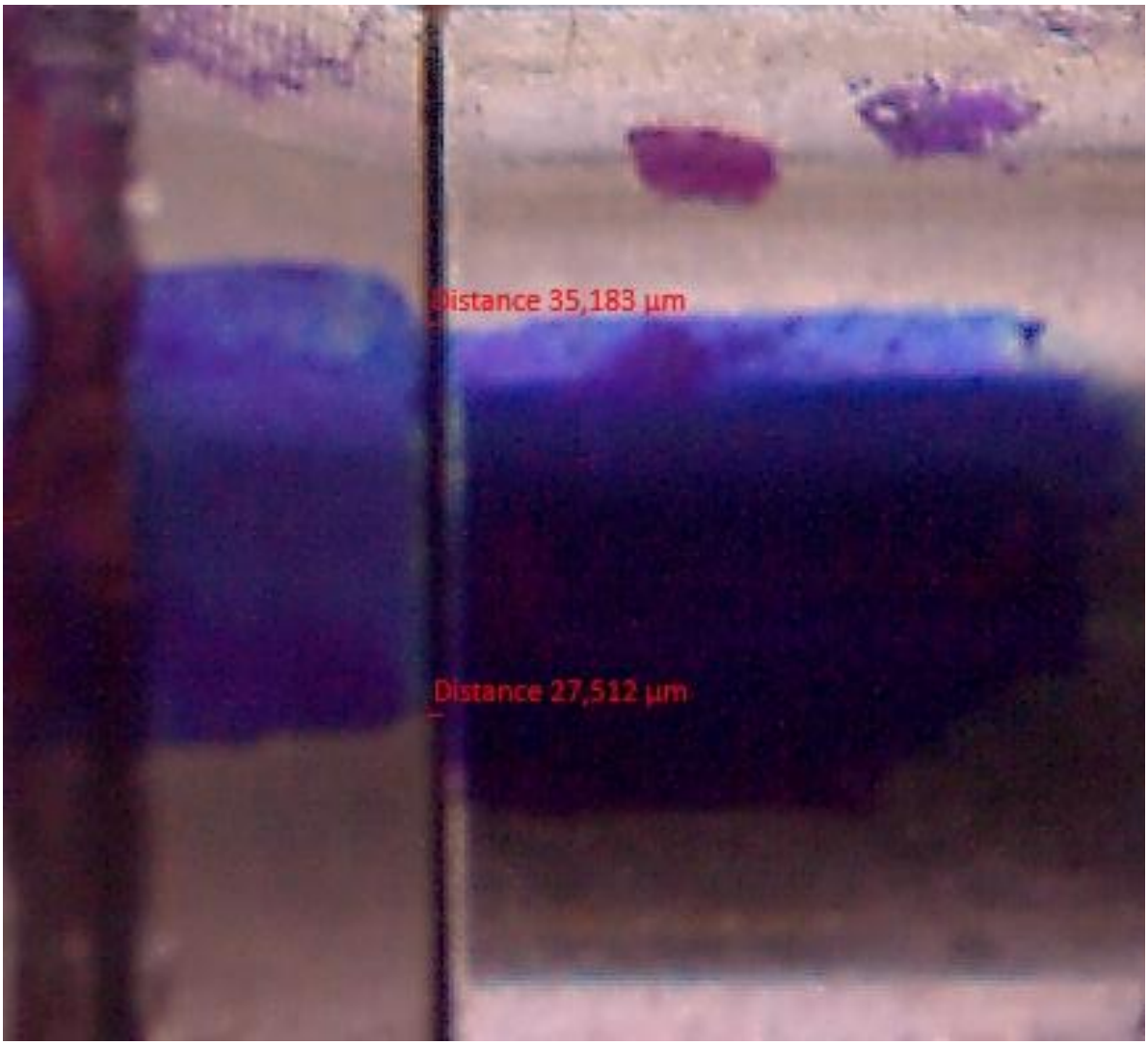

AmScope






A.I
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Distance 35,183 µm
Distance 27,512 µm

Resultados

	Mínimo	Máximo	Media	Mediana	Desviación estándar	P*
Posterior Derecho	24,36	113,06	48,78	43,67	28,14	
Anterior Derecho	19,08	31,39	24,9	24,32	4,23	
Anterior Izquierdo	15,16	32,15	23,72	23,39	6,89	0,015
Posterior Izquierdo	20,36	103,15	45,77	33,44	28,82	
Total	15,16	113,06	35,79	27,74	22,77	

Tabla 1. Prueba de Kruskal Wallis. Mediciones (µm) según la posición del espécimen.

	Mínimo	Máximo	Media	Mediana	Desviación estándar	P*
Posterior Derecho	24,36	113,06	48,78	43,67	28,14	0,006
Anterior Derecho	19,08	31,39	24,9	24,32	4,23	

	Mínimo	Máximo	Media	Mediana	Desviación estándar	P*
Anterior Derecho	19,08	31,39	24,90	24,32	4,23	0,115
Posterior Izquierdo	20,36	103,15	45,77	33,44	28,82	
Total	15,16	113,06	35,79	27,74	22,77	

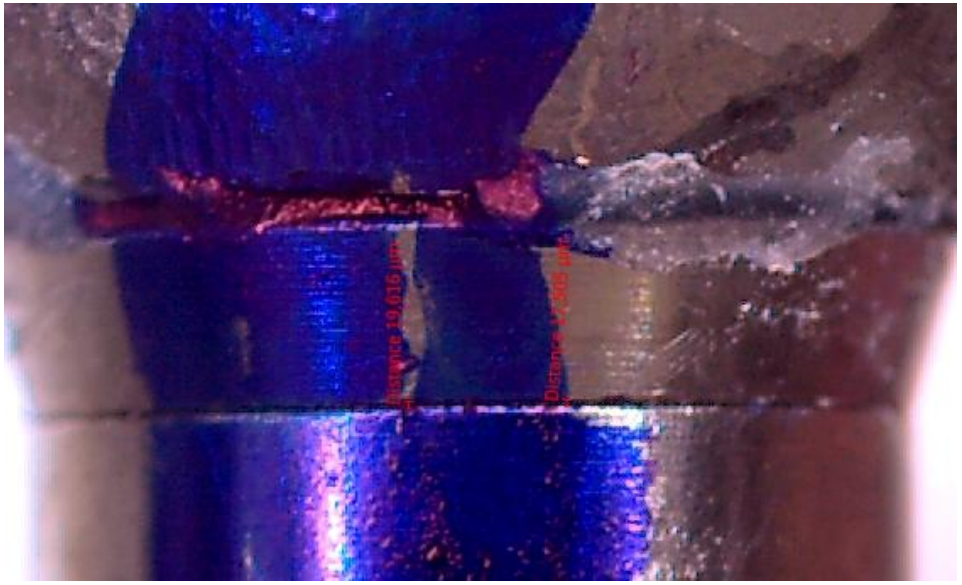
Tabla 2.3. Diferencias entre especímenes según su posición y presencia de T.U (A.D). Prueba de U-Mann Whitney

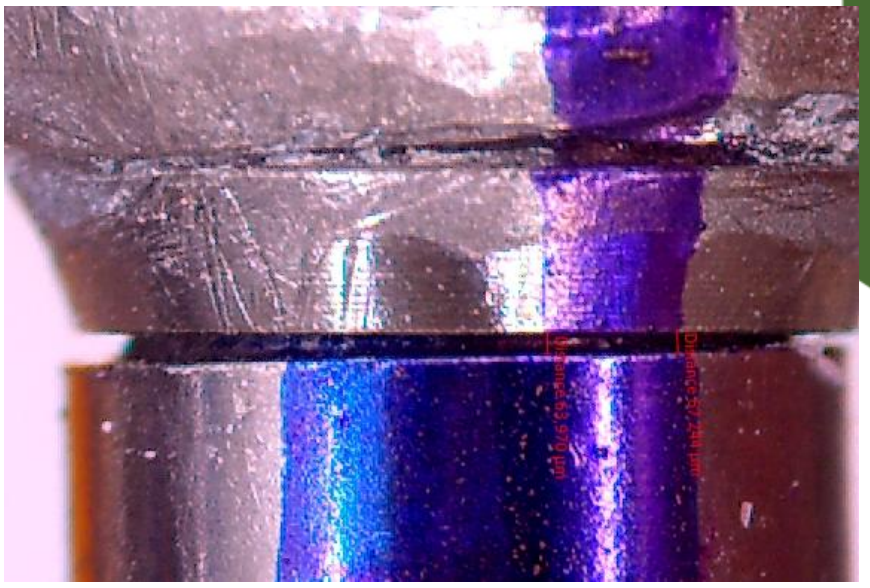
Discusión.

AUTOR	RESULTADO	COMPARACIÓN
Jemt y Cols. 1991	30 +/- 111 µm	15,16+/-113 µm
Jemt y Cols. 1996	91 +/- 296 µm	



Prueba de tornillo único (A.D), mejores valores en anteriores que en posteriores.







Modificación en la técnica de fabricación y confección de estructuras, modelos y cementación.

Fortalezas

Significancia clínica del estudio.

Factor económico.

Algo de dificultad para adaptar las cofias calcinables y las estructuras.

Limitaciones



Recomendaciones

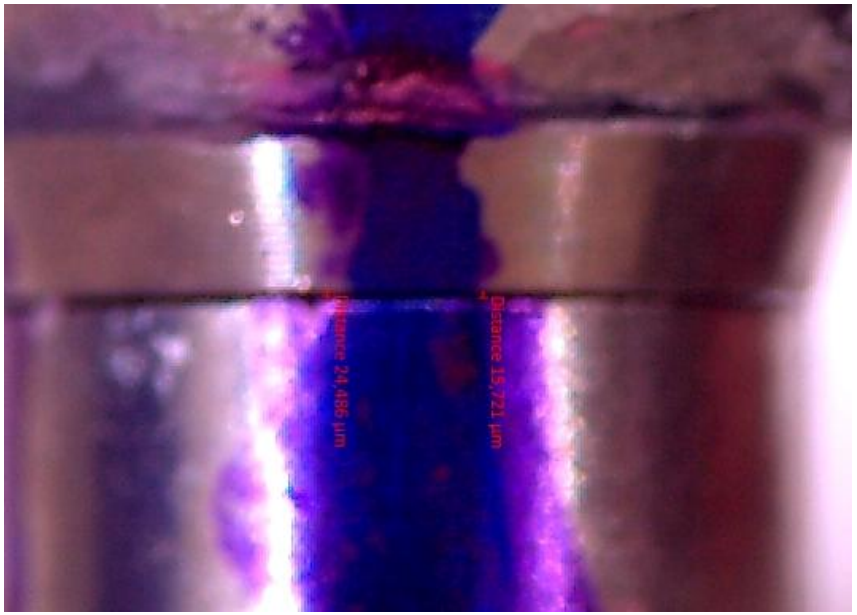
- Para futuras investigaciones, realizar una comparación entre híbridas convencionales (CAD/CAM) con las modificadas.
- Aumentar el espacio para el agente cementante (C.C)
- Medir la discrepancia de adaptación en sentido horizontal.
- Realizar un estudio con pruebas de tracción a las estructuras.
- Realizar nuevas mediciones cambiando de posición del tornillo o atornillando todos.

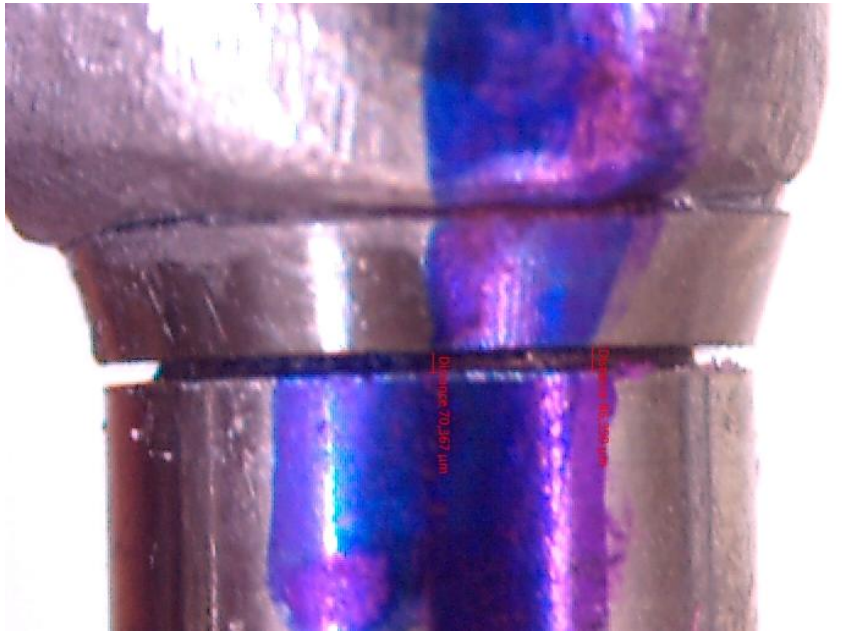
Conclusiones

- La adaptación marginal vertical de las estructuras metálicas están por debajo de los valores promedios aceptados.



- Los mejores valores de adaptación obtenidos fueron los puntos adyacentes al tornillo único, comparado con los otros puntos medidos, evidenciando un mejor comportamiento.





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GRACIAS



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