





Apically extruded debris associated with Hyflex CM, WaveOne Gold, and Protaper Next file systems: An in vitro study

MATERIAL AND METHOD







RESULT

Debris extrusion in (g)					
Study	Pre-weight (g):	Post-weight (g):	Net weight (g):		
group	Eppendorf tube	Eppendorf tube +	Extruded debris		
	(mean)	Irrigant + Debris	(mean)		
		(mean)			
1	0.493	0.518	0.025		
2	0.491	0.498	0.007		
3	0.495	0.502	0.005		

STATISTICAL ANALYSIS

		Mean	Significant difference (P<0.05)
	Protaper Next	0.0016	0.000530
	Hyflex CM	0.00138	0.000804
	WaveOne Gold	0.00116	0.000620

0.01
0.005
0.01
Protaper
Next Hyflex CM WaveOne
Gold
Apically extruded debris (g)

In the present study, the Hyflex CM system extruded quantitatively less debris than the PTN system, with no significant difference, and extruded more debris than the WaveOne Gold system, with no significant difference.

CONCLUSION

Under the experimental conditions of the present study, it can be concluded that all the instrumentation systems led to apical debris extrusion. However, WaveOne Gold system resulted in significantly less debris extrusion than the PTN system.

Presented by, Dr. Akanksha Kaushal (PGT) Dr. Sourav Thacker (PGT)