

## عنوان مقاله:

Corrosion of Ni-Ti Rotary Instruments: A Review

## محل انتشار:

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تعداد صفحات اصل مقاله: 5

## نویسندگان:

Zahed Mohammadi - *Adjunct Clinical Professor of Endodontics, Iranian Center for Endodontic Research (ICER), Research Institute of Dental Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran and Iranian National Elites Foundation, Tehran, Iran*

Jun-Ichiro Kinoshita - *Department of Conservative Dentistry, Showa University Dental Hospital, Tokyo, Japan*

Atsufumi Manabe - *Department of Conservative Dentistry, Showa University Dental Hospital, Tokyo, Japan*

Mikihiro Kobayashi - *Department of Conservative Dentistry, Showa University Dental Hospital, Tokyo, Japan*

## خلاصه مقاله:

The nickel-titanium (Ni-Ti) alloys used in endodontics contain 56% Ni and 44% Ti. The 2 unique features related to clinical dentistry (i.e., shape memory effect and superelasticity) are due to the transition from austenite to martensite in Ni-Ti alloy. When a superelastic Ni-Ti alloy undergoes a low tensile loading, normal elastic behavior occurs. In fact, at higher tensile loads, the elastic stress may reach a level at which there is extended horizontal region of elastic strain. The shape-memory property of Ni-Ti is derived from an atomic arrangement different from that of alloys like stainless steel. The purpose of this paper was to review the unique features of this alloy and mechanism of corrosion

## کلمات کلیدی:

Corrosion, Endodontics, Ni-Ti, Root canal preparation, Rotary Instrument

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