

## عنوان مقاله:

Nitinol Spinal Vertebrae: A Favorable New Substitute

## محل انتشار:

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## خلاصه مقاله:

Scoliosis, kyphosis, and bone fracture are health problems, especially of the elderly throughout the world. The vertebra protects the spinal cord. Any impairment to the vertebra can lead to pain and nervousness. Ni-Ti alloy (Nitinol) helps to resolve the problem by fulfilling such requirements as for strength, durability, resistance to wear, and shockwave damping which is due to the shape memory effect. Nitinol medical applications have so far been restricted to surgical devices and orthopaedics. Little has been said about Nitinol use for medication of the spinal vertebra disorder. This article appraises the potential features of Nitinol for vertebral implantation and therapeutic prescription consistent with the specific anatomical variation. Staples, screws, cages, stents, and posterior-stabilizers made of Nitinol have passed in-vitro tests and in some cases in-vivo examinations. Using anatomically tailored Nitinol for treatment and administration of the damaged vertebra is proposed as a forecastable dream.

## کلمات کلیدی:

Spinal, Vertebrae, Nitinol, Shape memory, Superelasticity, Implantation

## لینک ثابت مقاله در پایگاه سیویلیکا:

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