

# Titanium rings proving problematic for emergency care doctors

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Rings made of titanium—an increasingly popular alternative to gold and silver—are giving emergency doctors a headache because they are so difficult to prize off swollen fingers, reveals a case study published online in *Emergency Medicine Journal*.

But now help is at hand, thanks to the ingenuity of [plastic surgeons](#).

The popularity of titanium rings is growing because the metal is light yet strong, extremely durable, and doesn't cause skin allergies.

But a swollen finger caused by [ring](#) constriction is a relatively common problem in emergency care. And if not dealt with promptly, the constriction can cut off the blood supply, leading to tissue death and ultimately loss of the finger.

So time is of the essence. But while rings made of silver or gold can usually be prized apart with basic ring cutters, specialist cutting equipment, such as dental saws, drills, or diamond tipped saws are usually required for titanium rings.

These techniques not only take up to 15 minutes, but they can burn the underlying skin, and usually require more than one healthcare professional to do the deed. Furthermore, not all hospitals have ready access to this sort of equipment, the authors point out.

They came up with a simple speedy solution after a man came to their hospital's emergency department with a painful and very swollen left [ring finger](#) adorned by a titanium band.

The finger had become swollen after a prolonged bout of bathing in a warm spa some six hours earlier.

But attempts to remove the ring using traditional methods, such as elevation, lubrication, finger binding to compress the swelling and the use of a

manual ring cutter, were all in vain. Even the local fire service was unable to cut the ring off using its specialist cutting equipment.

The man was then admitted to the plastic surgery unit where further attempts to use manual ring cutters once again failed to split open the titanium ring.

Then the surgeons hit on the idea of using a large pair of bolt cutters, which are a standard piece of hospital operating theatre equipment. This approach worked in less than 30 seconds and the man went on to make an uneventful recovery.

"Our method used simple equipment that is readily available in most hospitals at all times, took less than 30 seconds to perform, and could be performed by a sole operator without damage to the underlying finger," conclude the authors.

**More information:** Removing a titanium wedding ring, *Emergency Medicine Journal*, [DOI: 10.1136/emered-2015-204962](https://doi.org/10.1136/emered-2015-204962)

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