

The Inflammatory Effect of Titanium Distal Radius Plates on Canine Tendons

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Lay Summary

Fractures in the extremities occur commonly and often require metallic hardware, plates and screws, to repair them. Space age materials like titanium have theoretical advantages over traditional stainless steel. However, biologic reactivity to titanium similar to an allergy can create tissue scar with either welding of the tendon or rupture of the tendons that normally move the wrist and fingers. This propensity was studied in this project and shown to be a property of pure titanium metal, which suggests that it must be used cautiously or rejected for human and animal surgery.

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