Internal fixators in small animal orthopedics

Summary / Zusammenfassung

Internal fixators are plates with a locking mechanism between the plate hole and the screw head. They have several advantages over conventional plates and are already widely used in human surgery. The inherent stability between the screw heads and the plate hole reduces the risk for screw loosening, allows insertion of only monocortical screws, and avoids bone necrosis under the plate. Fewer screws per fragment are needed for stability than in conventional plates. One internal fixator system, the ComPact UniLock 2.0/2.4, has great potential in small animal orthopedics due to its size. Clinical application of the system was tested and the system was found to be applicable for a wide variety of indications. Indications are joint-near fractures, fractures of the pelvis, mandibular and maxillar fractures, cervical fractures and instabilities, stabilization of certain ligamentous injuries, and revision surgeries.

General description of the system and its application possibilities, and use of the system for the treatment of intertarsal instabilities and cervical spinal instabilities have been described. A doctoral thesis on evaluation of the UniLock system for repair of long bones was completed in 2008 (Dr. Michael Kull). The work has shown that the Unilock system is a suitable implant for repair of long bone fractures in cats and small dogs. It is especially helpful for comminuted, for fractures near joints, and to treat fracture union disorders.

A new locking plate, Advanced Locking Plate System (ALPS), has been purchased and is currently tested clinically.

Publications / Publikationen


Project Leadership and Contacts / Projektleitung und Kontakte

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