HyProtect™ Coated MPP Bone Plate

Prospective Veterinary Patient Observation

A Preliminary Report

Matthew Rodriguez, Christopher Sidebotham
BioMedtrix
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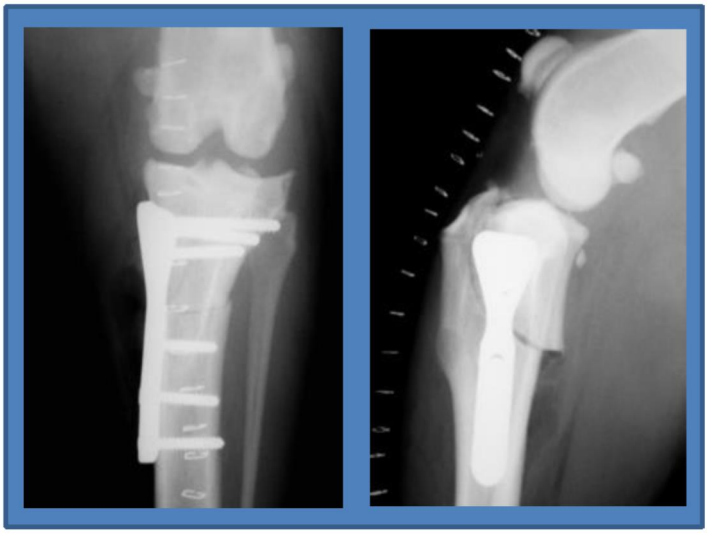
All implants are susceptible to infections at the surgical incision site and on the surface of the implant. In the latter case, when the infection is isolated to the proximity of the implant, it is called a periprosthetic infection.
The MPP bone plate was designed to accommodate several clinical indications including partial carpal arthrodesis, iliac shaft fractures, tibial plateau leveling osteotomy (TPLO), distal radial fractures, inter-trochanteric osteotomy and pelvic osteotomy.

In this type of procedure regular infection rates can range from 20% to 30%.
In the case of corrective actions the cost increase to the patient-owner expense can be up to $1500.

In the case of external fixators infections have been reported to occur in up to 40% of the cases.



TPLO

This prospective patient observation is a pilot study to confirm that coating a bone plate can provide protection against a wide spectrum of bacteria during the early post-op period and to verify that there are no complications or side effects. This study has been developed to understand the potential improvement of an antimicrobial coating for bone plates composed of a patented Silver and SiOxCy-coating matrix called HyProtect™. Since Bio-Gate's HyProtect™ silver coating technology has been successfully tested in previous animal trials and has also been successfully used in a human case study no complications or side effects associated with the HyProtect silver coating were anticipated.

Seven from the top BioMedtrix bone plate customers were chosen to participate in the survey, a prospective patient observation. The observation study was done using ordinary family dogs that were treated in veterinary medical offices and centers. Most of the healing took place at home since the dogs were discharged soon after treatment. Observations were made over a three months period after surgery. The results are as follows:

Preliminary results from the study indicate that all patients had healed their osteotomy wounds. There have been no complications or infections associated with the antimicrobial coating.

# Sites	# Plates	# Coating Issues	# Infections
7	70	0	0

A complete and detailed report of the patient observation will be presented by BioMedtrix in San Diego at the ACVS (American College of Veterinary Surgeons) Summit on October 16th/17th 2014.

Additional studies with the HyProtect coating are listed.

1. Khalilpour P, et.al: Ag/SioxCy plasma polymer coating for antimicrobial protection of fracture fixation devices. J Biomedical Materials Research Applied Biomaterials, Vol. 94B, Issue 1, July 2010.
2. Weik, T. (2014), "Werkstoffe und Beschichtungen orthopädischer Implantate", in „OTTI 2014, Anwenderforum: „Funktionale Implantate und Implantatoberflächen", Regensburg, Germany

Should you be interested in additional information about our antimicrobial technologies please contact:

Please contact for **North America:**

Karl F Richter
President

RFH BioTek Inc
27 Taylorwood Avenue,
Bolton, Ontario,

Canada L7E 1J5

Phone: +1-905-857-0219

Email: rfh@rfhbiotek.com

Please contact for **Europe:**

Thomas Konradt
Director Business Development

Bio-Gate AG
Neumeyerstrasse 28-34
90411 Nuremberg, Germany

Phone: +49 (0) 911 / 59724-8329
Fax: +49 (0) 911 / 59724-8301
e-mail: thomas.konradt@bio-gate.de