

MRI Image Compatibility: Interventional Use

Biophan Technologies is committed to the expansion of MRI for both diagnostic and interventional use, and the improvement of MRI compatibility of all medical devices and implants.

Currently, there are two issues that limit the effectiveness of some medical devices when used with MRI: MRI safety and MRI image compatibility. Biophan has technologies available to address both MRI safety and MRI image compatibility.

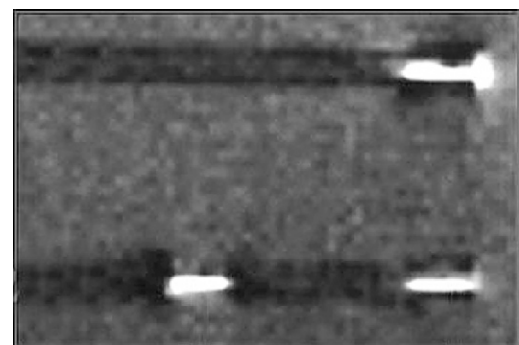
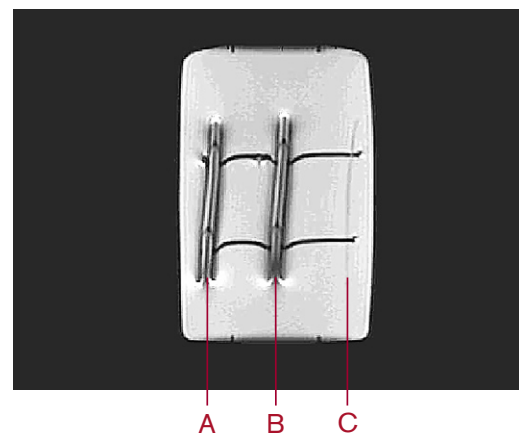
Enhanced Visibility

Enhanced visibility can result in better imaging of interventional devices under MRI guidance, enabling procedures that currently cannot be performed effectively under MRI. The image to the right, on top, shows two aluminum wires (A and B), imaged under MRI and made visible by the addition of a nanomagnetic particle coating. The third wire (C), on the right in the image, is not coated and therefore not visible under MRI.

The image to the right, on the bottom, shows resonator bands applied to a catheter tip, and imaged under MRI. The resonator bands, employing Biophan's aMRIs resonator technology, provide an active marker, clearly visible under MRI to improve accurate placement in MRI guided interventional procedures.

Intellectual Property

Biophan's internally developed technology and patents, in combination with exclusive license to aMRIs technology (developed at Biophan Europe GmbH) and nanomagnetic technology (developed at Nanoset LLC) provides comprehensive intellectual property coverage for Biophan's MRI image compatibility solutions. Biophan's patent estate, including assigned and licensed patents, stands at 36 issued patents, with more than 75 applications in various stages of prosecution worldwide. ■



Biophan's technologies, including nanomagnetic coatings and aMRIs resonators, greatly increase the scope of possibility for MRI imaging of interventional devices.