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EFFICACY OF QUANTIC MOLECOLAR RESONANCE IN THE TREATMENT OF CONTAINED DISC HERNIATIONS: A PRELIMINARY EXPERIENCE

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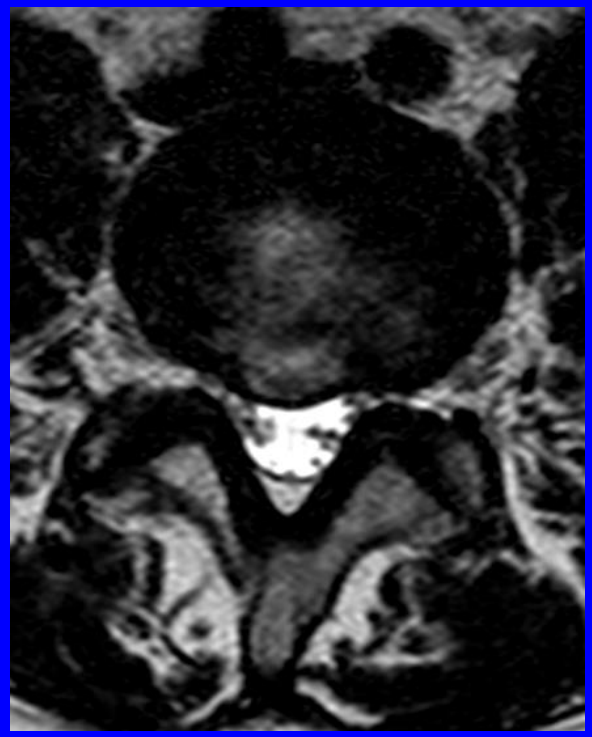
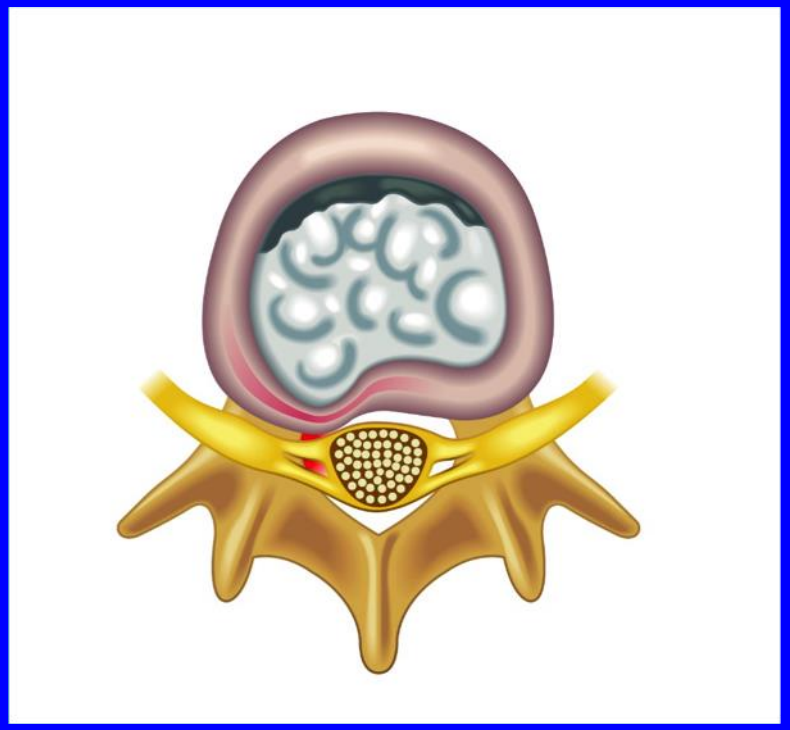
DISCLOSURES

Marcia: CONSULTANT FOR AB MEDICA, VEXIM
Piras: NO DISCLOSURES
Marini: NO DISCLOSURES
Spinelli: NO DISCLOSURES

PURPOSE

The aim of this study is to provide the efficacy of Quantic Molecular Resonance in the treatment of disc protrusions by means of pain relief and functions

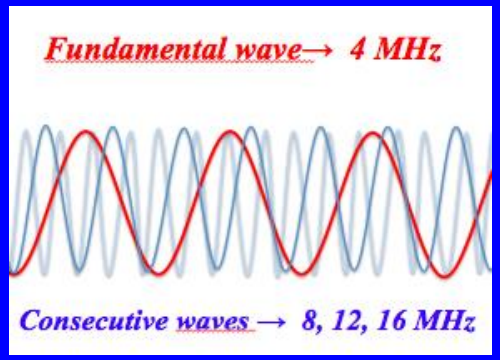


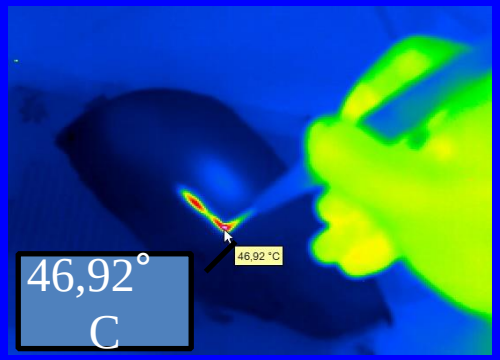


METHODS AND MATERIALS

Quantic Molecular Resonance combines different frequencies to send the ideal quantum energy to act on the molecular bonds
By regulating the intensity and emission frequencies, the molecules will vibrate to the point where even the bond that joins them together will break

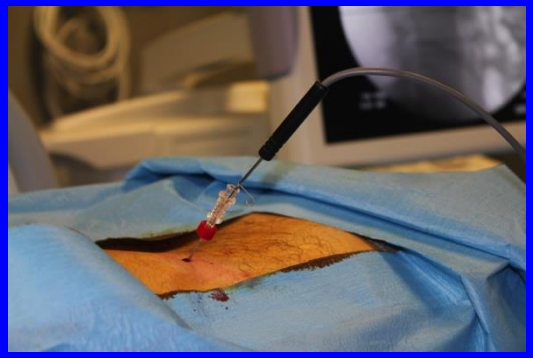
Through a bipolar electrode introduced into the intervertebral disc connected with a generator, QMR Technology applies a fundamental wave at 4 MHz and next waves at 8, 12, 16 MHz breaking molecular bonds into the nucleus, without overheating of adjacent tissue (<50 ℃)

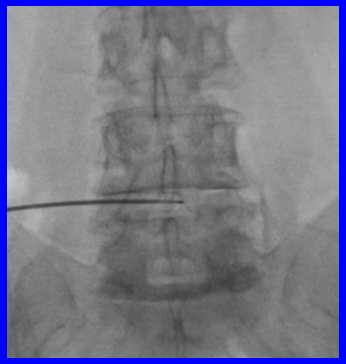




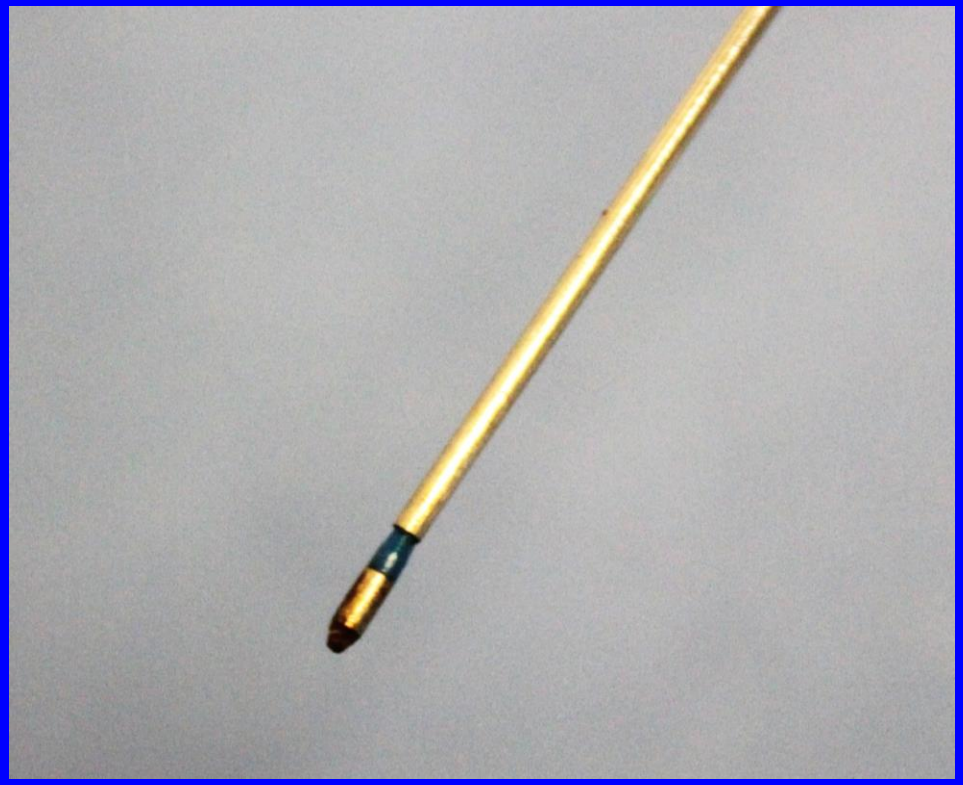
METHODS AND MATERIALS

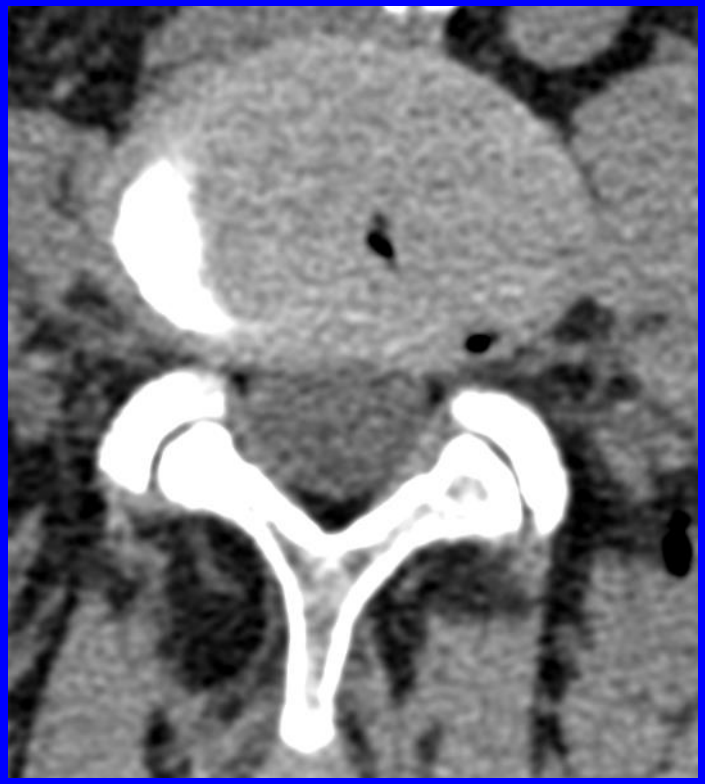
Twenty-eight patients (12 males, 16 females, av. Age: 51.2) with sciatic pain due to contained discal herniation (Pfirmann grade 1-3) were selected for treatment with percutaneous disc decompression by means of Quantic Molecular Resonance. Diagnosis was confirmed by MRI and EMG in all patients. All procedures were performed under fluoroscopic guidance and with local anesthesia. Seventeen gauge Crawford needles were used to insert the probe. Clinical evaluation, assessment of pain by means of a 11-point visual analogue scale (VAS, 0-10) and of functions by means of the Oswestry Disability Index (ODI 0- 50) was performed at baseline, at one month and at three months after the procedure. RM checks have been performed at three month after procedure.



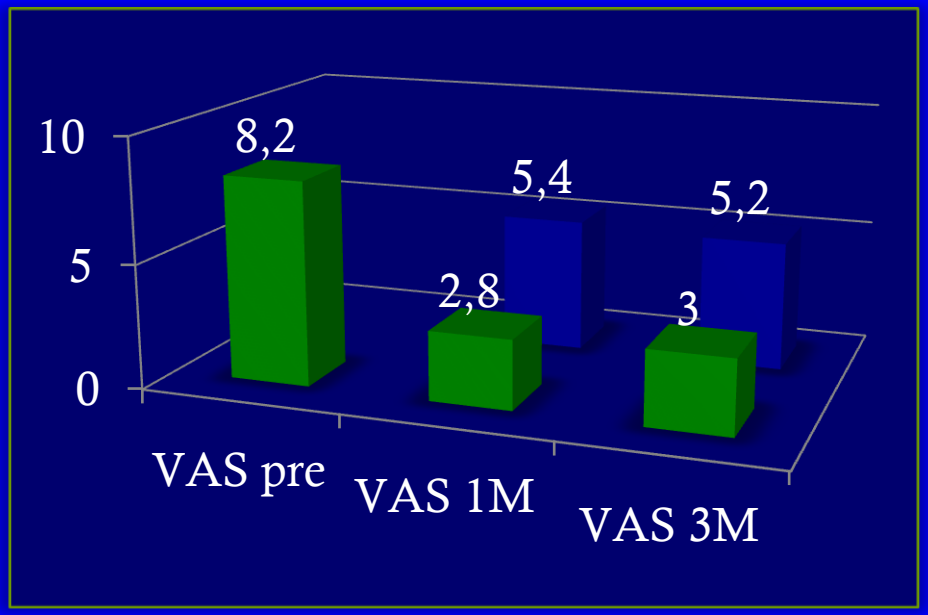


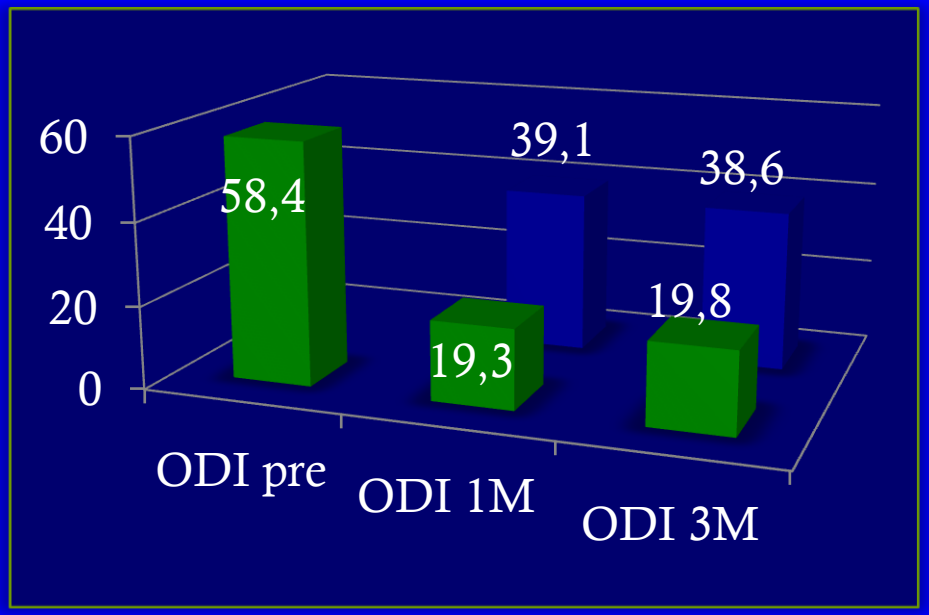
RESULTS





RESULTS





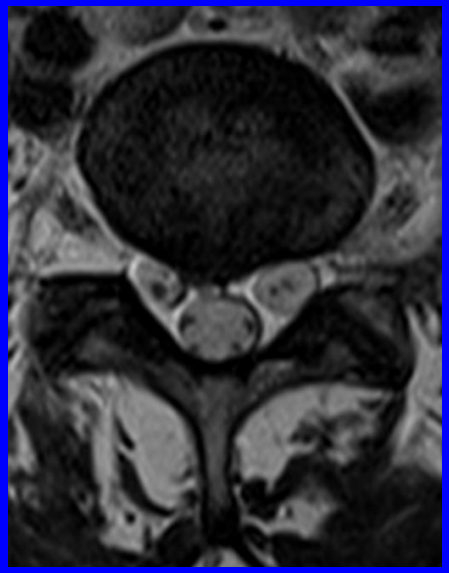
A total of 28 intervertebral discs were treated

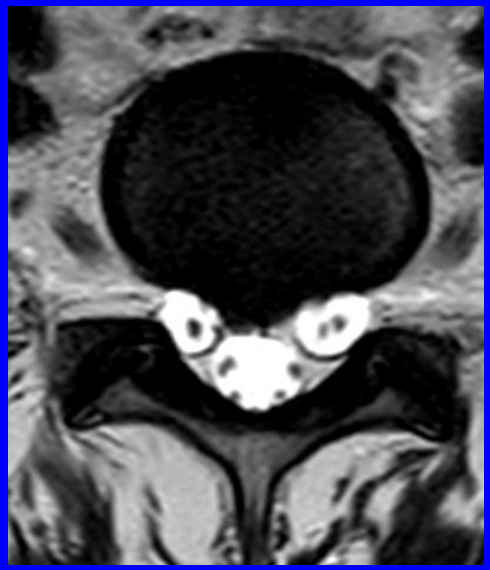
Baseline pain was 8.2 ± 1.5 VAS score, baseline ODI was 58.4%
At one month, pain was 2.8 ± 2.3 VAS score ($p<0.01$), while ODI was 19.3%
At three month, pain was 3 ± 2.5 VAS score ($p<0.01$), while ODI was 19.8%

No complications arose

RESULTS

MRI CHECK






L5S1 pre-op

L5S1 after 3 month

CONCLUSIONS

From our preliminary study, the treatment of contained discal herniation with Quantic Molecular Resonance is an optimal therapy for symptomatic patients showing a good reduction of pain and a good increase of functions

Randomized studies with high level of evidence are needed

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