



# SPINAL NEWS

I n t e r n a t i o n a l

Issue 11 | spinalnewsinternational.com

April 2009

## The “No” Zone

Since intradiscal injection of ozone was first proposed in the '80s as a treatment option for disc herniation, it has attracted some controversy.

Many healthcare professionals maintain that there is not enough research showing that ozone therapy is an acceptable alternative to standard treatments. Well-designed randomised, controlled trials (RCTs) are needed to confirm that intradiscal injection of ozone, which is strongly reactive, is superior to traditional, conservative care, they say. RCTs are also needed to show that the treatment is a valid alternative to surgery, they say.

Both believers and non-practitioners highlight that ozone therapy is not for everyone. Patient selection is vital; patients with paralysis of the legs, or those with loss of bladder movement, still require traditional surgery.

“It is vital to consider the absolute indications for surgery such as progressive foot drop, cono-cauda syndrome and hyperalgetic sciatica resistant to any type of medical “therapy,” says Muto (See right: “Ozone therapy treats...”) Also, patients with calcified discs, infection or free fragments or cord compression “are not appropriate,” says Murphy.

In 2007, a study by Roberto Gazzeri *et al*, published in the February issue of *Spine*, concluded that acute fatal septicaemia should be considered among the major complications of the oxygen-ozone therapy in the treatment of a herniated lumbar disc. Authors did qualify, however, that it was a rare complication.

Gazzeri’s study said: “We report the first case of a local infection with systemic fatal dissemination secondary to this treatment.”

## Ozone therapy treats patients, not images

**Mario Muto, Chief of Neuroradiology, Cardarelli Hospital, Naples, Italy shared his views with *Spinal News International*.**

- “Each year, we treat 600 people affected by herniated nucleus pulposus in my department, using ozone treatment. Additionally, more than 15 neuroradiology centres in Italy carry out the same type of treatment.
- “In order to be selected for ozone therapy, patients can be of any age with a small to medium herniated nucleus, without surgical indications (i.e. no major neurological deficit, no foot droop) and their pain must be resistant to medical and physical therapy for the last three months.



Mario Muto

- “Clinical and MR or CT examination is mandatory to decide on the treatment.
- “The treatment is performed under CT or fluoro guidance at any possible level, cervical or lumbar (cervical is less frequent), with a 20-22G needle, and the oblique or translaminar approach is obtained. The procedure lasts 15 minutes and usually no major contraindications and complications are reported.
- “We treat patients and not images! Clinical evaluation is the most important step in deciding to use this therapy.
- “In terms of product development, we will probably see the evolution of a disposable device able to produce not more than 10ml of the gas at selected concentration.
- “Current and future applications of ozone therapy will be expanding the use of this treatment for joints disease.
- “In the future, we believe that more and more doctors will be doing this type of therapy. In India and China, for example, it has become the first treatment of choice for the indications mentioned above.
- “We have reported our experiences in various journals. The follow-up is done with Visual Analog Score and Oswestry Disability Score at one and six months. The normal improvement is an 80% success.
- “Many active members such as Marco Leonardi and Matteo Bonetti have dedicated a lot of their life and profession to this topic.
- “There is a World Federation of Ozone therapy and the Italian Federation of Ozone Therapy. There is also the *International Journal of Ozone Therapy* in which studies are collected.”

## Contents

- 2 Virtual tool trains for spinal anaesthesia**  
New device with virtual needle could help trainees self-learn
- 4 Routine imaging for low-back pain is not beneficial to patients**  
Researchers recommend that physicians refrain from imaging unless they observe features of a serious underlying condition
- 4 Comment and Analysis: Richard D Guyer**  
Texas Back Institute’s experience with nearly 1,000 Total Disc Replacement procedures
- 6 Zoarski asks “Vertebroplasty or kyphoplasty: Who decides?”**  
Review of available data on the two procedures
- 8 Mixed results for X-stop in spinal stenosis**  
It works for some, but not for others, conclude researchers
- 10 Profile: Karin Buettner-Janz**  
How an Olympic gold medalist turned to orthopaedics
- 12 High-viscosity cement shows comparable leakage rate to kyphoplasty**  
Confidence may increase safety of standard kyphoplasty
- 14 Industry News and Product News**  
Stryker, Medtronic, Scient’x, Osseon and more

Copyright © 2009 BIBA Medical Ltd. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted in any form or by any other means, electronic, mechanical, photocopying, recording or otherwise without prior permission in writing of the editor.

