

Joint Event
3rd International Conference on
Spine and Spine Disorders
&
International Conference on
Addiction Research and Therapy

November 26-27, 2018 | Dubai, UAE



Giancarlo Guizzardi

Tuscany Surgical Center, Italy

Ten years results with Interlaminar Disc Assistance implant "IntraSPINE®"

Introduction:

"Motion Preservation" it is not a name or a fashion, but when indicated, is a philosophy like "Minimally Invasive Surgery" or "Endoscopic Surgery" etc. To preserve the movement in the lumbar DDD surgery in the past 15 years have been used, often by chance, an unbelievable number of interspinous devices placed on the market. But the literature clearly shows us how with age the spinous processes undergo radical changes in their morphology (J.R. Jenkins 2001 and C. Aylott 2012); with the time from the implantation was also clearly highlighted a bone remodeling with loss of correction (R. Sobottke 2009), just to spinous processes fractures (D.H. Kim 2010). Finally, we can say that the spinous processes were not created to bear a load (D.E.T. Shepherd 2011).

The diffusion of the interspinous motion preservation devices is due to the easy and reversible surgical technique and to a low number of complications in the early time after the surgery. Biomechanical studies have also clearly shown that many of these devices do not retain absolutely the movement, even though they limit it, even in varying degrees, and are really just "spacers" (H.J. Wilke 2008). Their capability to assist the disc is also low, because their location is far from the I.A.R. The reasons for which preserve the movement are linked to the increasingly high knowledge of occurrence of a high percentage of cases of ASD after fusion surgery (P. Ekman 2009, K.J. Song 2011). For all these reasons many firms have shifted their focus on systems for "interspinous fusion" or other surgeons, like us, on motion preservation systems no more interspinous but "interlaminar".

We have therefore developed and diffused a new device for the treatment of degenerative disk disease of the lumbar spine which is called IntraSPINE®. The fundamental features of IntraSPINE® is the difference in compression ratio between the anterior and posterior parts of the device. The anterior part (the nose really interlaminar), is able to distract and to re-open the neuroforamen, which in turn re-lifts and re-aligns the facet joints, as well as re-strain the thickened yellow ligament due to the reduction of the disc height. The posterior part which is compressible because "tunnelized", does not refrain the spinous process movement and therefore the ROM (Range of Motion).

The indications are:

- Chronic low back pain in black disk with facet-syndrome (pre-operative evaluation with dynamic X-rays and block tests of the facet joints)
- Soft and/or dynamic and foraminal stenosis
- After operations for big expelled disc hernias in young patients so as to prevent the collapse of the disc and the subsequent CLBP
- Insufficiency of the supra-spinal fibrous complex
- Topping of after operation for synovial cyst
- Kissing spine

Conclusion: We present the pictures of various cases treated with minimum follow-up of 4 years. The absence of major complications, the minimally invasive surgical procedure and the good clinical results allow us to say that with a correct patient selection we can have a "new arrow in our bow" for the treatment of the lumbar DDD.

Speaker Biography

Giancarlo Guizzardi is staff at Neurosurgical Department of the University and City Hospital of Florence (Chief of the Spine Surgery Section to December 2015) since September the 1st 1977. He is Specialist in Neurosurgery, Neurophysiopathology and Sport's Medicine. From the beginning of 80's he devoted his surgical activity especially to the surgical procedures of the degenerative, traumatic and neoplastyc pathology of the spine (about 7000 procedures). He published about 90 papers and chapters in the most important Italian and international medical journals and books. He was invited as speaker, chairman and organizer to the most prestigious Italian and international meetings of spinal surgery. He invented and developed new devices, protocols and min-invasive approaches in "non-fusion" technologies in Degenerative Disk Disease of the Spine. Since 2002 he is agreement professor of the School of Medicine and Surgery at Florence University. He is in the editorial board of the "European Spine Journal", member of the editorial board of "Journal of Neurosurgical Sciences", of "World Neurosurgery", of "Asian Spine Journal", of the "World Spine Column Journal" and of the "Journal of Spinal Surgery". He is also corresponding member of the Society of South America Neurosurgical Societies, Honorary lifetime member of the Neuro Spinal Surgeons Association of India, active member of the EANS (European Association Neurosurgical Society), SINch (Italian Neurosurgical Society), GIS (Italia Spine Society), Eurospine (European Spine Society) and NASS (North American Spine Society). From December 1st, 2015 moved the surgical activity from Florence to the "Tuscany Surgical Hospital" in Arezzo where is the Head of the Spine Surgery Activity. From December 2016 "Guest Professor" by the first Affiliated Hospital of Zhejiang Chinese Medical University.

e: euydgu@tin.it