



## Questions and comments on the efficacy of transforaminal laser annuloplasty *versus* intradiscal radiofrequency annuloplasty for discogenic low back pain

Daehyun Jo

Pain Center, Pohang Wooridul Hospital, Pohang, Korea

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### Correspondence

Daehyun Jo

Pain Center, Pohang Wooridul Hospital, 256 Poseuko-daero, Buk-gu, Pohang 37755, Korea  
Tel: +82-54-240-6000, Fax: +82-54-240-6195, E-mail: pandjo@naver.com

### LETTER TO THE EDITOR

I read the article titled 'Efficacy of transforaminal laser annuloplasty *versus* intradiscal radiofrequency annuloplasty for discogenic low back pain' authored by Park et al. [1]. It is an interesting paper to the interventional pain physician. I would like to point out some issues. As the authors said, there are a lot of treatment modalities for chronic discogenic pain. So, we need appropriate patient selection according to the indications before doing invasive treatments. According to the authors, the inclusion criteria included an annular tear of the disc, and the exclusion criteria included a herniated intervertebral disc [2,3]. Did they do discography for all the patients? If not, how did they confirm the annular tear without the herniated disc? It would have been better to show us the evidence of the distinction between an annular tear and a herniated disc.

When the authors did transforaminal epiduroscopic laser annuloplasty (TELA), they removed the disc material using forceps, which means it was a percutaneous endoscopic lumbar discectomy (PELD). Does that mean that they did a PELD with a TELA? We need some endoscopic pictures from the TELA, which would help the readers to understand their procedures. The authors described

the intradiscal radiofrequency annuloplasty (IDRA) procedure in Materials and Methods, which said that 'After placement of the cannula, granulation tissue could often be visualized, with spinal scope (LASE, Minneapolis, MN). However, in the discussion on page 118 in the left column, they described their IDRA as being under C arm fluoroscopy, rather than being performed endoscopically'.

It looks like they used transforaminal laser annuloplasty (TFLA) and TELA for the same procedure. If not, we need to establish their definitions for TFLA and TELA, and correct the overuse of abbreviations, which obstruct and interrupt scientific communication.

### CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

### ORCID

Daehyun Jo, <https://orcid.org/0000-0001-8310-6561>

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## Author's reply

### Chan Hong Park

Department of Anesthesiology and Pain Medicine, Daegu Wooridul Spine Hospital, Daegu, Korea

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I would like to thank Dr. Jo for his interest and concerns regarding the transforaminal epiduroscopic laser annuloplasty (TELA) versus intradiscal radiofrequency annuloplasty (IDRA) for patients with symptomatic lumbar discogenic low back pain. I read with interest the letter to the editor regarding our paper comparing TELA and IDRA for discogenic low back pain [1] and I would like to offer the following comments and observations.

1. It is very well known that that provocative discography is a very useful diagnostic tool for confirming the pathologic level for discogenic low back pain. In cases of multi-level annular tear lesions on magnetic resonance imaging, provocative discography was performed. Occasionally, in cases where a lesion was at one level and could be clearly seen, we skipped discography. Also, disc herniation was excluded, and internal disc disruption was included in our study.

2. TELA and percutaneous endoscopic lumbar discectomy (PELD) are completely different. The main focus of PELD is the removal or decompression of the herniated disc. On the other hand, TELA refers to equipment that is used to perform an annuloplasty. A TELA working sheath cannot be inserted into the disc to observe its interior like an endoscope. The intradiscal procedure (granu-

lation tissue removal) of TELA is performed under the C-arm. The PELD working sheath is placed half intradiscally and half epidurally. Both the intradiscal and extradiscal procedure are fully performed under endoscopic guidance. In addition, TELA uses a small working channel (outer diameter, 3.5 mm) compared with the PELD working sheath (more than 5 mm). Studies using percutaneous endoscopic annuloplasty (modified PELD) have been published [2,3]. This procedure is performed on the disc. A comparative study of the two procedure (TELA vs. PELD) is needed to examine complications, efficacy *etc.*

3. Normally, IDRA is performed under the C-arm. However, in our hospital, we have a LASE<sup>®</sup> kit (Clarus Medical LLC, Minneapolis, MN). So, we performed it under the C-arm and LASE<sup>®</sup> kit. Sometimes, we have used the epiduroscope.

4. The terminology is believed to require further discussion.

## CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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