ORTOPEDIA e TRAUMATOLOGIA
Santa Casa da Misericórdia de Santos

EVIDÊNCIAS NA CIRURGIA DA HÉRNIA DISCAL LOMBAR

Alberto O. Gotfryd, 2010

INTRODUÇÃO

- Herniações discais: menos 5% lombalgias[1]
- Principal causa radiculopatia e cirurgias[2]
- Mixter e Barr: primeira descrição cirúrgica[3]
- Numerosos procedimentos menos invasivos

[1]Mayer HM, Brock M. Percutaneous endoscopic discectomy: surgical technique and preliminary results compared to microsurgical discectomy. J Neurosurg. 1993;78:216-225.

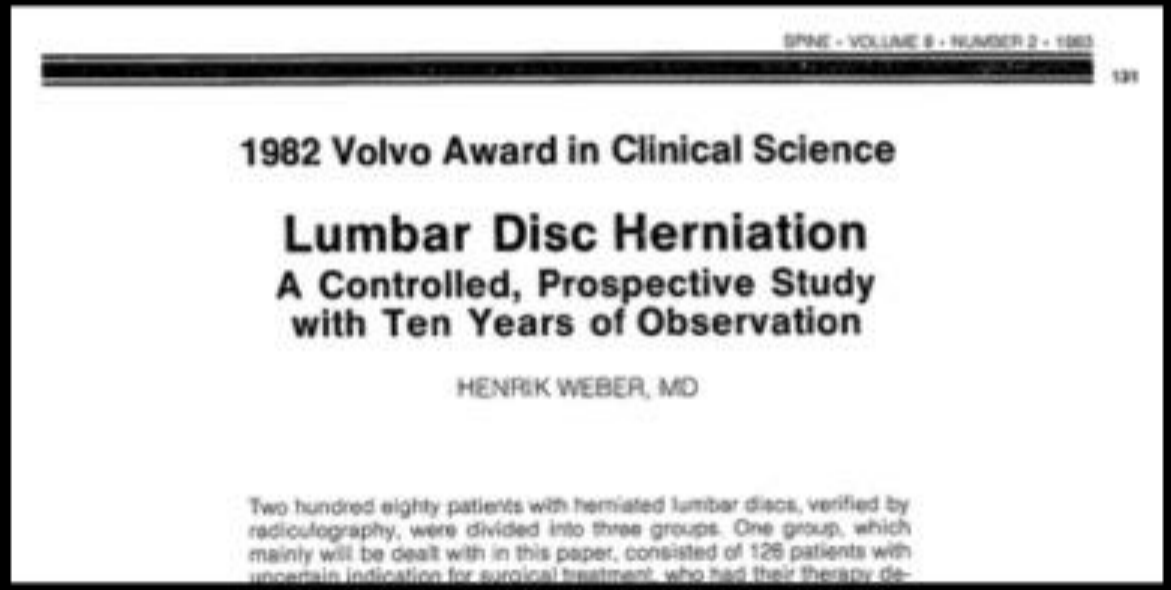
[2]Woolf AD, Pfleger B. Burden of Major Musculoskeletal Conditions. Bulletin Of World Health Organization 2003; 81:

[3]Mixter WJ, Barr JS. Rupture of the intervertebral dic with involvment of the spinal canal. N Engl J Med 1934;211:210-215.

EXISTE SUPORTE CIENTÍFICO PARA NOVAS TÉCNICAS CIRÚRGICAS?

DISCECTOMIA x CONSERVADOR

Weber (1983)



SPINE • VOLUME 8 • NUMBER 2 • 1983

131

1982 Volvo Award in Clinical Science

Lumbar Disc Herniation
A Controlled, Prospective Study with Ten Years of Observation

HENRIK WEBER, MD

Two hundred eighty patients with herniated lumbar discs, verified by radiculography, were divided into three groups. One group, which mainly will be dealt with in this paper, consisted of 126 patients with uncertain indication for surgical treatment, who had their therapy de-

Weber, H.: Lumbar disc herniation. A controlled, prospective study with ten years of observation. SPINE:8(2)1983

DISCECTOMIA x CONSERVADOR

Weber (1983)

- ECR com 126 pacientes
- HDN com indicação cirúrgica relativa
- Submetidos à Discectomia ou Reabilitação
- Avaliação com 1, 4 e 10 anos

Weber, H.: Lumbar disc herniation. A controlled, prospective study with ten years of observation. SPINE:8(2)1983

DISCECTOMIA x CONSERVADOR

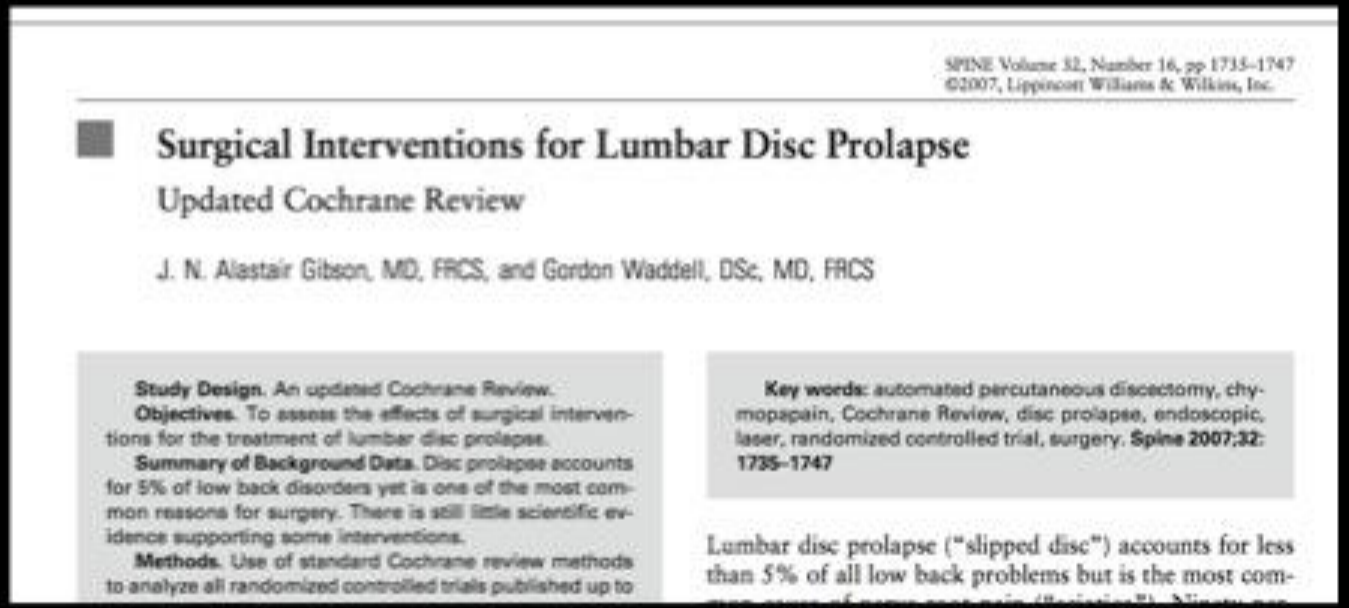
Weber (1983)

- **Cirurgia: melhores resultados com 1 ano** ($p<0,005$)
- **Após 4 anos melhora discreta sem significância**
- **Resultados mantidos aos 10 anos P.O.**

Weber, H.: Lumbar disc herniation. A controlled, prospective study with ten years of observation. SPINE:8(2)1983

REVISÃO COCHRANE

Gibson (2007)



SPINE Volume 32, Number 16, pp 1735–1747
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Surgical Interventions for Lumbar Disc Prolapse

Updated Cochrane Review

J. N. Alastair Gibson, MD, FRCS, and Gordon Waddell, DSc, MD, FRCS

Study Design. An updated Cochrane Review.

Objectives. To assess the effects of surgical interventions for the treatment of lumbar disc prolapse.

Summary of Background Data. Disc prolapse accounts for 5% of low back disorders yet is one of the most common reasons for surgery. There is still little scientific evidence supporting some interventions.

Methods. Use of standard Cochrane review methods to analyze all randomized controlled trials published up to

Key words: automated percutaneous discectomy, chymopapain, Cochrane Review, disc prolapse, endoscopic, laser, randomized controlled trial, surgery. **Spine 2007;32: 1735–1747**

Lumbar disc prolapse ("slipped disc") accounts for less than 5% of all low back problems but is the most com-

Gibson JNA, Waddell G.: Surgical Interventions for Lumbar disc prolapso: Updated Cochrane review. SPINE,2007:32(16)1535-47

REVISÃO COCHRANE

Gibson (2007)

- 40 ECR e 2 ECQR
- Avaliou
  - discectomia x tto clínico
  - Técnicas percutâneas de discectomia

Gibson JNA, Waddell G.: Surgical Interventions for Lumbar disc prolapso: Updated Cochrane review. SPINE,2007:32(16)1535-47

REVISÃO COCHRANE

Gibson (2007)

- **Discectomia alívio precoce que tto conservador**
- **Efeitos história natural: inconclusivos**

Gibson JNA, Waddell G.: Surgical Interventions for Lumbar disc prolapso: Updated Cochrane review. SPINE,2007:32(16)1535-47

REVISÃO COCHRANE

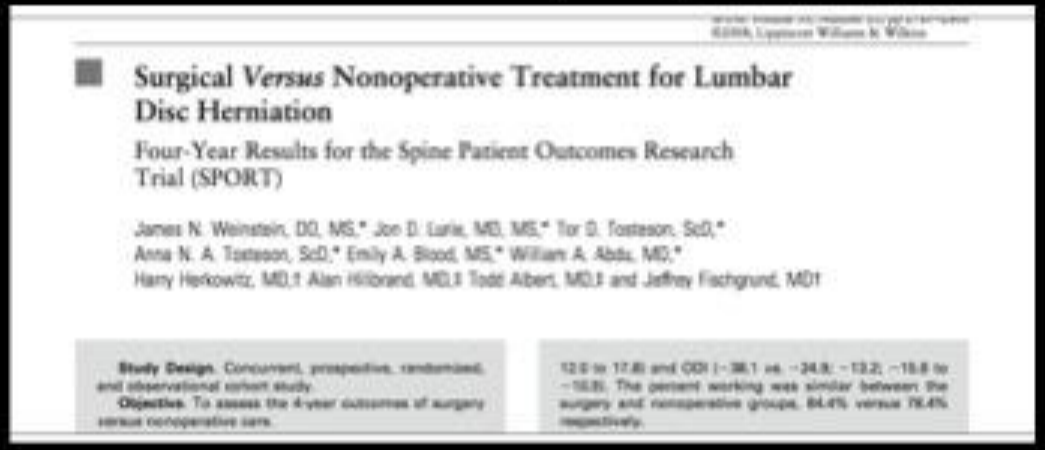
Gibson (2007)

- **Técnica endoscópica:**
  - **Discreta vantagem sangramento e retorno atividades**
  - **Sem diferenças clínicas**

Gibson JNA, Waddell G.: Surgical Interventions for Lumbar disc prolapso: Updated Cochrane review. SPINE,2007:32(16)1535-47

DISCECTOMIA x CONSERVADOR

Weinstein (2008)



Surgical *Versus* Nonoperative Treatment for Lumbar Disc Herniation

Four-Year Results for the Spine Patient Outcomes Research Trial (SPORT)

James N. Weinstein, DO, MS,* Jon D. Lurie, MD, MS,* Tor D. Tosteson, ScD,* Anna N. A. Tosteson, ScD,* Emily A. Blood, MS,* William A. Abdu, MD,* Harry Herkowitz, MD,† Alan Hilibrand, MD,‡ Todd Albert, MD,‡ and Jeffrey Fischgrund, MD†

- **ECR Multicêntrico**
- **501 participantes**
  - **Ciatalgia 6 semanas**

DISCECTOMIA x CONSERVADOR

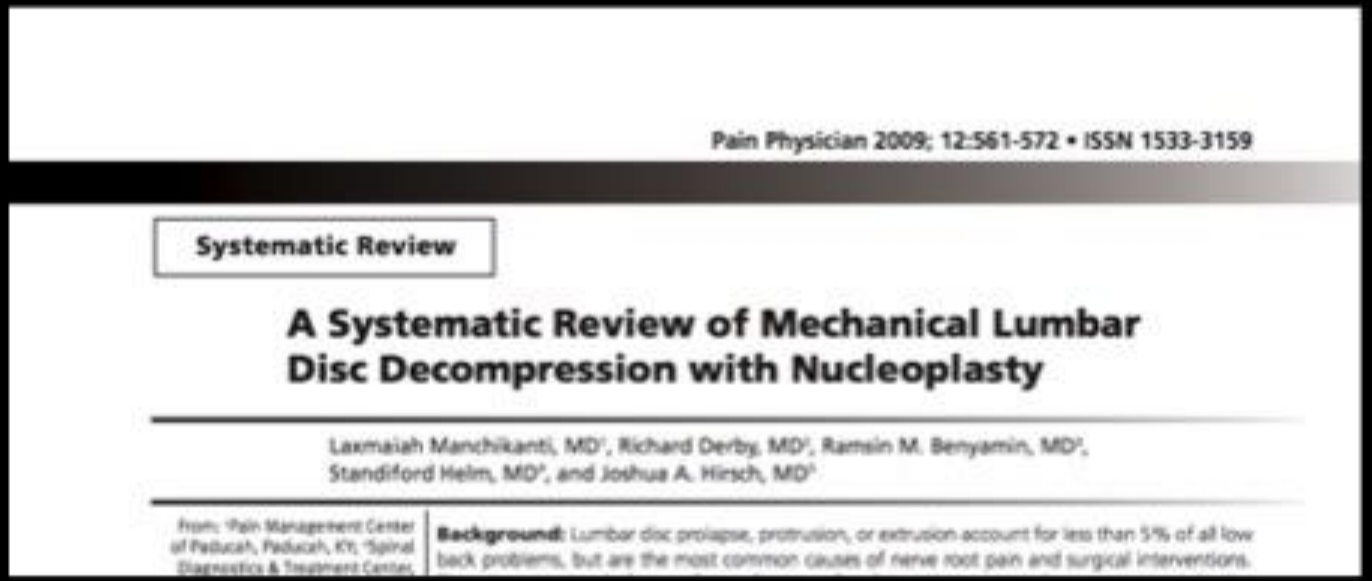
Weinstein (2008)

- Seguimento médio de 4 anos
- Grupo cirúrgico superior em todos os critérios
- Exceto retorno ao trabalho
- 65% grupo conservador - cirúrgicos

James N. Weinstein, DO, MS,* Jon D. Lurie, MD, MS,* Tor D. Tosteson, ScD,* Anna N. A. Tosteson, ScD,* Emily A. Blood, MS,* William A. Abdu, MD,* Harry Herkowitz, MD,† Alan Hilibrand, MD,‡ Todd Albert, MD,‡ and Jeffrey Fischgrund, MD†.Surgical Versus Nonoperative Treatment for Lumbar Disc Herniation Four-Year Results for the Spine Patient Outcomes Research Trial (SPORT)

NUCLEOPLASTIA

Manchikanti et al. (2009)



Pain Physician 2009; 12:561-572 • ISSN 1533-3159

Systematic Review

A Systematic Review of Mechanical Lumbar Disc Decompression with Nucleoplasty

Laxmaiah Manchikanti, MD[1], Richard Derby, MD[2], Ramsin M. Benyamin, MD[3], Standiford Helm, MD[4], and Joshua A. Hirsch, MD[5]

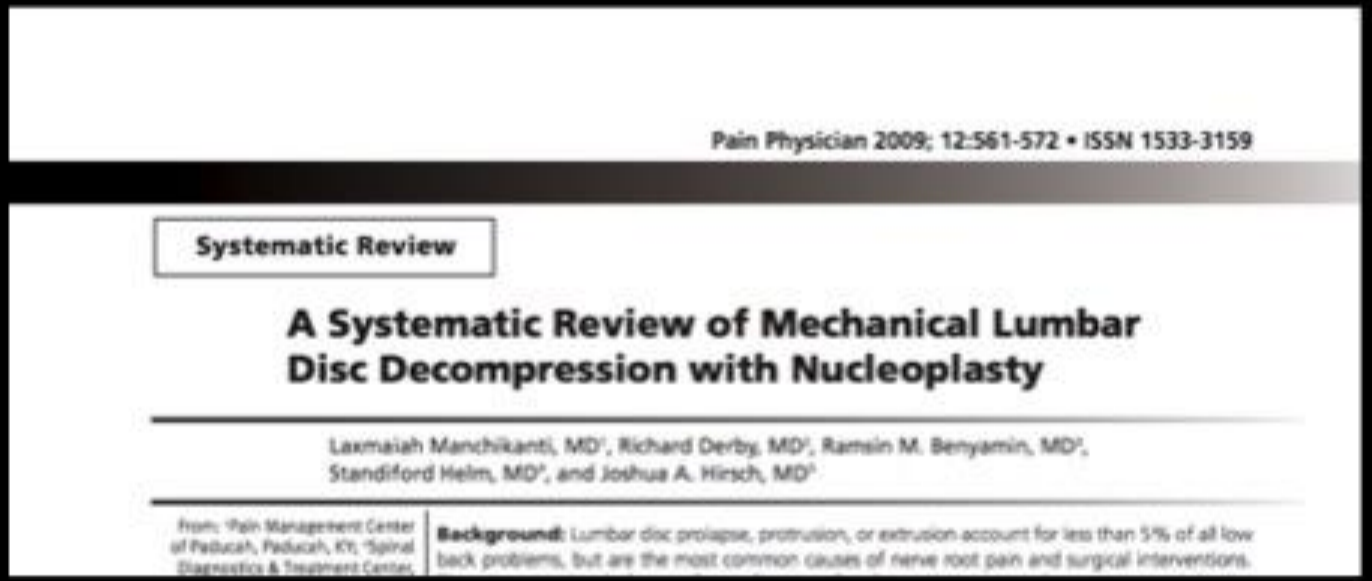
From: [1]Pain Management Center of Paducah, Paducah, KY; [2]Spinal Diagnostics & Treatment Center,

Background: Lumbar disc prolapse, protrusion, or extrusion account for less than 5% of all low back problems, but are the most common causes of nerve root pain and surgical interventions.

A Systematic Review of Mechanical Lumbar Disc Decompression with Nucleoplasty (2009) Laxmaiah Manchikanti, MD1, Richard Derby, MD2, Ramsin M. Benyamin, MD3, Standiford Helm, MD4, and Joshua A. Hirsch, MD5

NUCLEOPLASTIA

Manchikanti et al. (2009)



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NUCLEOPLASTIA

Manchikanti et al. (2009)

- Avaliaram herniações contidas
- Desfecho principal: melhora da dor
- Nenhum ECR incluído
- 5 Estudos observacionais: base de dados

A Systematic Review of Mechanical Lumbar Disc Decompression with Nucleoplasty (2009) Laxmaiah Manchikanti, MD1, Richard Derby, MD2, Ramsin M. Benyamin, MD3, Standiford Helm, MD4, and Joshua A. Hirsch, MD5

NUCLEOPLASTIA

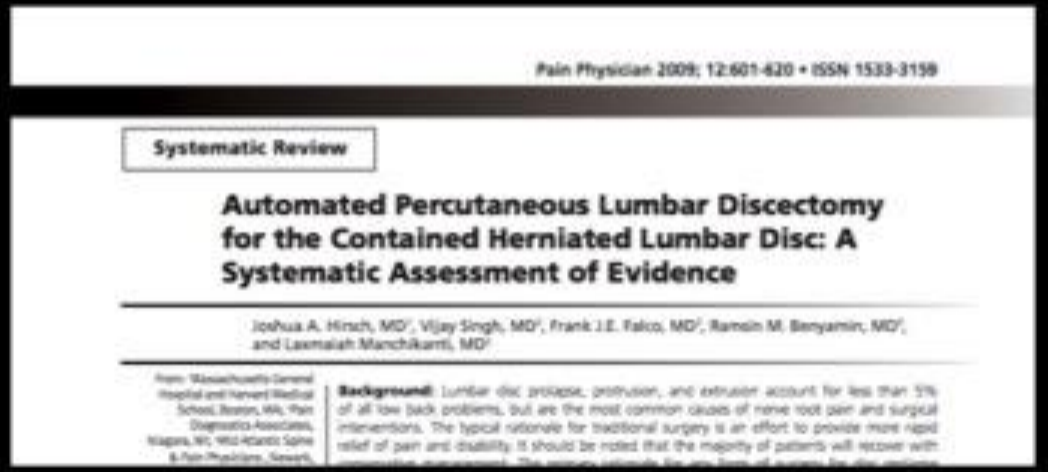
Manchikanti et al. (2009)

- **Fraca recomedação/ moderada evidência para radiculopatia**
- **Nenhuma evidência para dor lombar**

A Systematic Review of Mechanical Lumbar Disc Decompression with Nucleoplasty (2009) Laxmaiah Manchikanti, MD1, Richard Derby, MD2, Ramsin M. Benyamin, MD3, Standiford Helm, MD4, and Joshua A. Hirsch, MD5

APLD - DISCECTOMIA PERCUTÂNEA

Hirsch et al. (2009)



Pain Physician 2009; 12:601-620 • ISSN 1533-3159

Systematic Review

Automated Percutaneous Lumbar Discectomy for the Contained Herniated Lumbar Disc: A Systematic Assessment of Evidence

Joshua A. Hirsch, MD[1], Vijay Singh, MD[2], Frank J.E. Falco, MD[3], Ramsin M. Benyamin, MD[4], and Laxmaiah Manchikanti, MD[5]

From: [1]Massachusetts General Hospital and Harvard Medical School, Boston, MA; [2]Pain Diagnostics Associates, Niagara, NY; [3]Mid-Atlantic Spine & Pain Physicians, Newark,

Background: Lumbar disc prolapse, protrusion, and extrusion account for less than 5% of all low back problems, but are the most common causes of nerve root pain and surgical interventions. The typical rationale for traditional surgery is an effort to provide more rapid relief of pain and disability. It should be noted that the majority of patients will recover with

Joshua A. Hirsch, MD, Vijay Singh, MD, Frank J.E. Falco, MD, Ramsin M. Benyamin, MD, and Laxmaiah Manchikanti, MD5
Automated Percutaneous Lumbar Discectomy for the Contained Herniated Lumbar Disc: A Systematic Assessment of Evidence.
Pain Physician 2009; 12:601-620

APLD - DISCECTOMIA PERCUTÂNEA

Hirsch et al. (2009)

- **Revisão Sistemática: 4 ECR**
- **Casos Selecionados (HND Contidas)**
- **Forte recomedação / Fraca evidência**

Joshua A. Hirsch, MD, Vijay Singh, MD, Frank J.E. Falco, MD, Ramsin M. Benyamin, MD, and Laxmaiah Manchikanti, MD5
Automated Percutaneous Lumbar Discectomy for the Contained Herniated Lumbar Disc: A Systematic Assessment of Evidence.
Pain Physician 2009; 12:601-620

DISCECTOMIAS

International Orthopaedics (SICOT)
DOI 10.1007/s00264-008-0559-2

REVIEW

A systematic review of randomised clinical trials using posterior discectomy to treat lumbar disc herniations

Alberto Gotfryd · Osmar Avanzi

Received: 18 February 2008 / Revised: 5 March 2008 / Accepted: 6 March 2008
© Springer-Verlag 2008

Abstract The focus of this study was to examine the safety and effectiveness of three different discectomy techniques using a posterior approach for the treatment of herniated

lombaires. Il existe un petit nombre d'études prospectives randomisées comparant les techniques de discectomies par voie postérieure lombaire. Aucune revue systématique n'a

Gotfryd A, Avanzi O.: A systematic review of Randomized clinical trials using posterior disccectomy to treat lumbar disc herniations. Int Orthop.2009;33(11)11-17.

DISCECTOMIAS

Gotfryd A, Avanzi O (2009)

- **RS de ECR**
- **Compararam 3 técnicas de discectomia**
- **Clássica x Micro x Endo**

Gotfryd A, Avanzi O.: A systematic review of Randomized clinical trials using posterior discectomy to treat lumbar disc herniations. Int Orthop.2009;33(11)11-17.

CLÁSSICA x MICRO x ENDO

SEM DIFERENÇAS ESTATISTICAMENTE SIGNIFICANTES

DESFECHOS PRIMÁRIOS

- MELHORA DA DOR
- FORÇA MOTORA
- REFLEXOS
- LASÉGUE
- AVALIAÇÃO PESSOAL

Gotfryd A, Avanzi O.: A systematic review of Randomized clinical trials using posterior discectomy to treat lumbar disc herniations. Int Orthop.2009;33(11)11-17.

CLÁSSICA x MICRO x ENDO

- DM e DE – Menor volume de sangramento
- Sem diferenças clínicas entre grupos
- Alta hospitalar e retorno às atividades precoce

Gotfryd A, Avanzi O.: A systematic review of Randomized clinical trials using posterior discectomy to treat lumbar disc herniations. Int Orthop.2009;33(11)11-17.

OBRIGADO