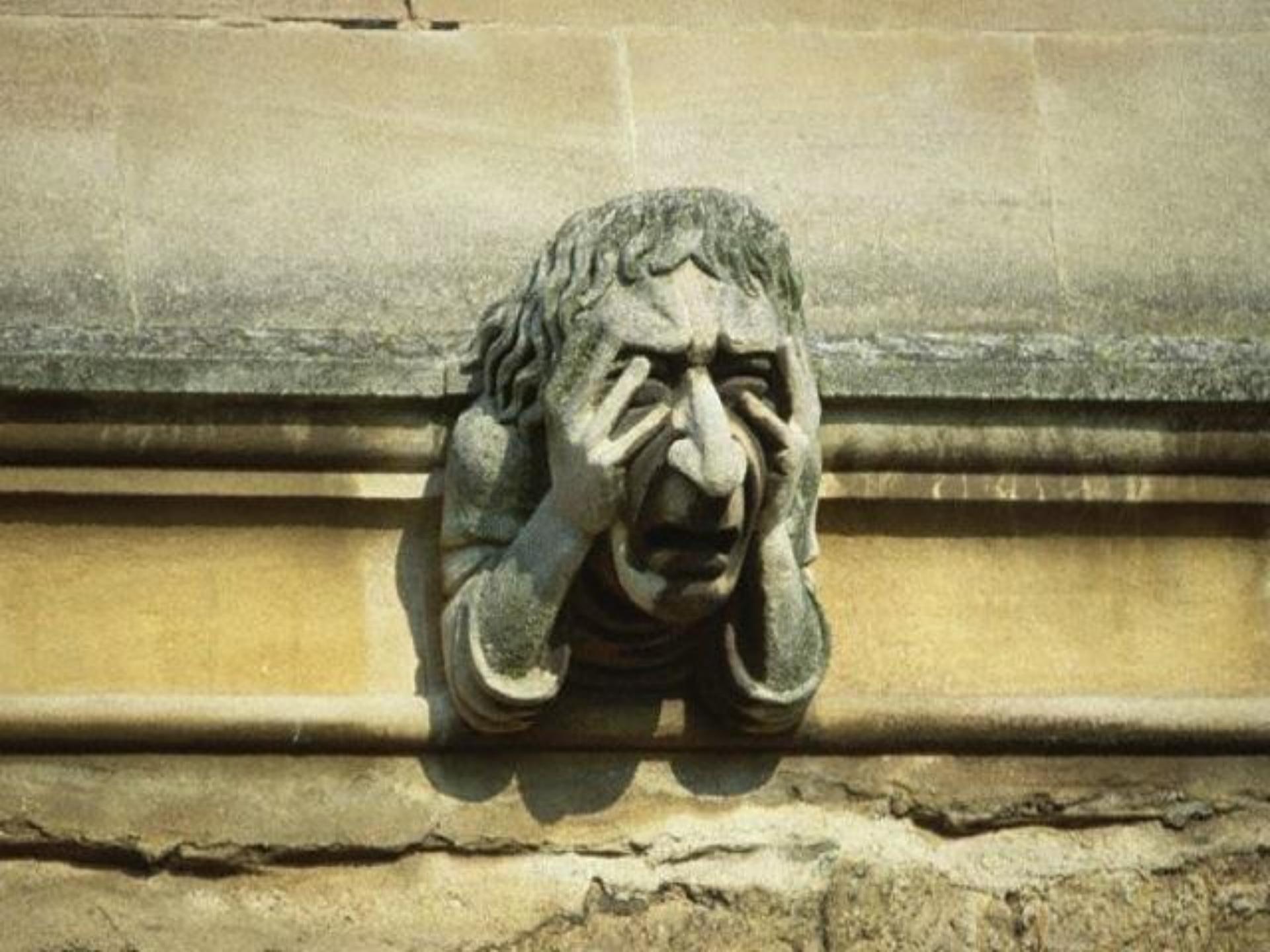


Dor
Axial x Apendicular
Dor
Referida x Irradiada

Como identificar e tratar:

Marcello Penholote

Neurocirurgia - Santa Casa Belo Horizonte



Disclosure: No conflicts of interest.

Marcello Penholote

Neurocirurgia - Santa Casa Belo Horizonte



Dor Axial ?

Dor Lombar

Dor axial - Anatomia

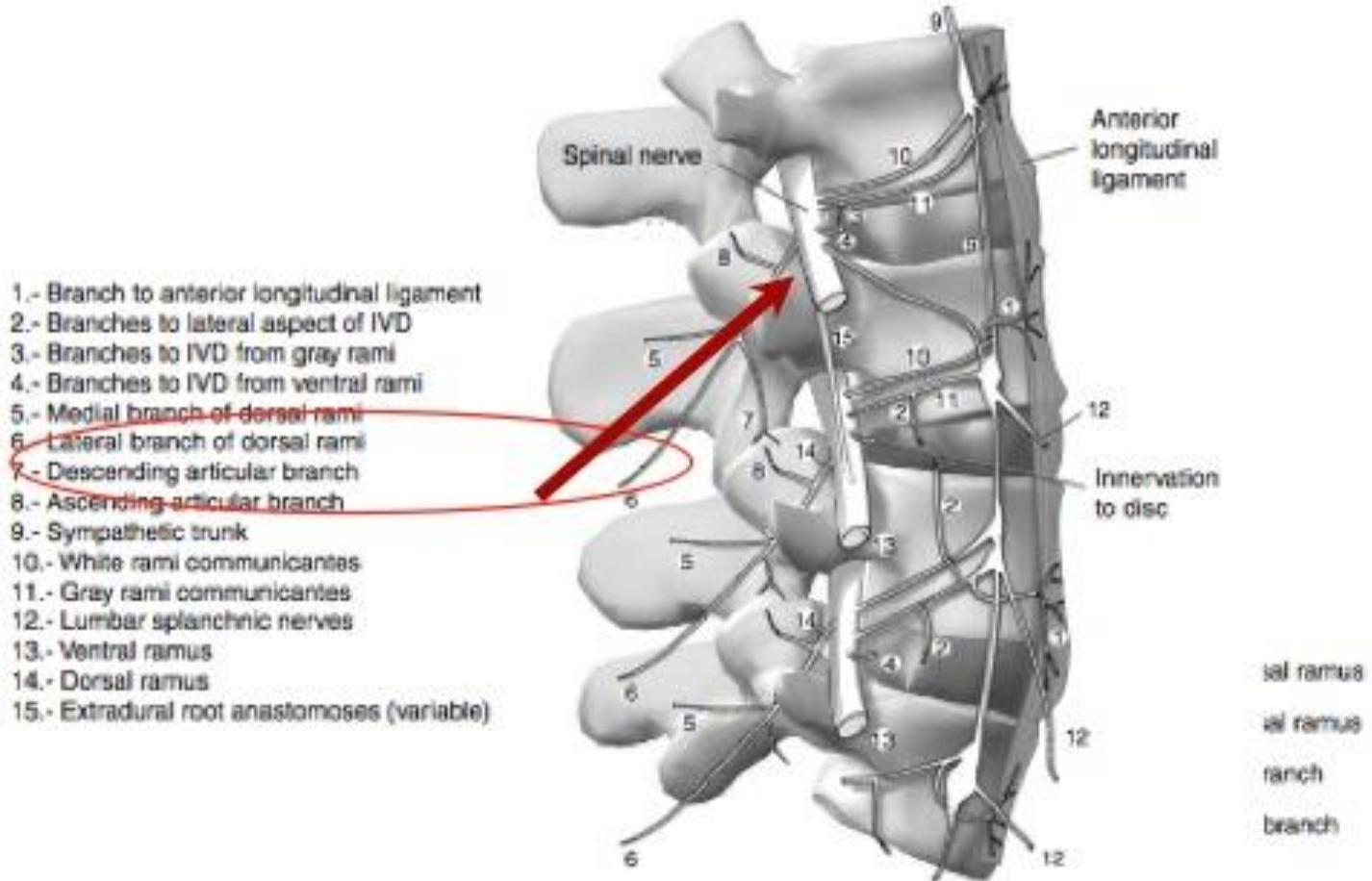


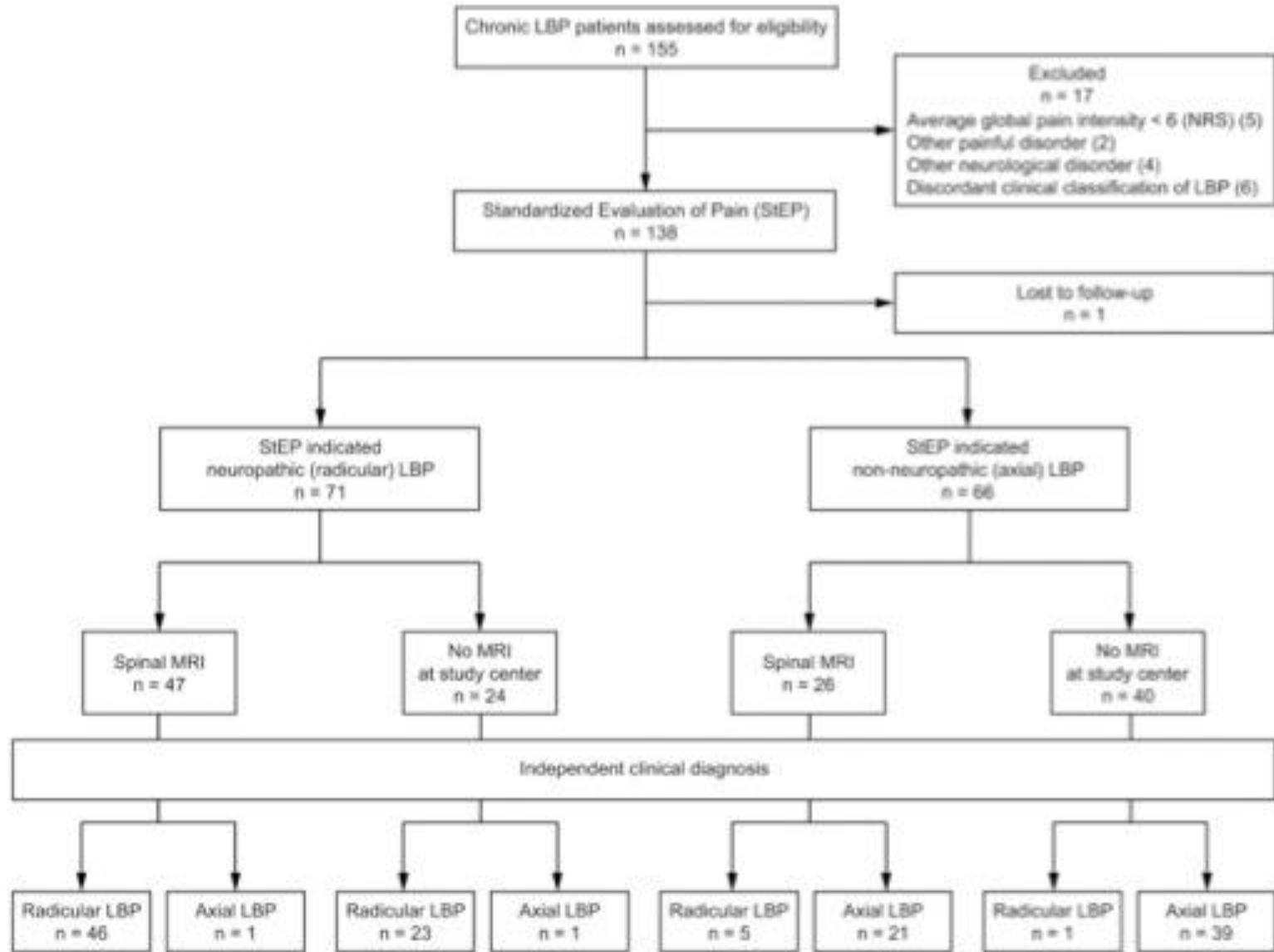
FIGURE 7.5 Lateral view of peripheral nerve anatomy of the spine. (Copyright J.M. True, D.C.)

Conventional measures of chronic pain either rely on global scores to assess pain intensity and determine treatment success, or they employ surrogate markers of improvement such as gain of function and quality of life

Dworkin RH, Turk DC, Farrar JT, Haythornthwaite JA, Jensen MP, et al. (2005) Core outcome measures for chronic pain clinical trials: **IMMPACT** recommendations. **Pain** 113: 9–19.

A Novel Tool for the Assessment of Pain: Validation in Low Back Pain

Joachim Scholz,^{1*} Richard J. Mannion,² Daniela E. Hord,¹ Robert S. Griffin,¹ Bhupendra Rawal,³ Hui Zheng,³ Daniel Scoffings,⁴ Amanda Phillips,⁵ Jianli Guo,¹ Rodney J. C. Laing,² Salahadin Abdi,⁶ Isabelle Decosterd,⁷ and Clifford J. Woolf¹



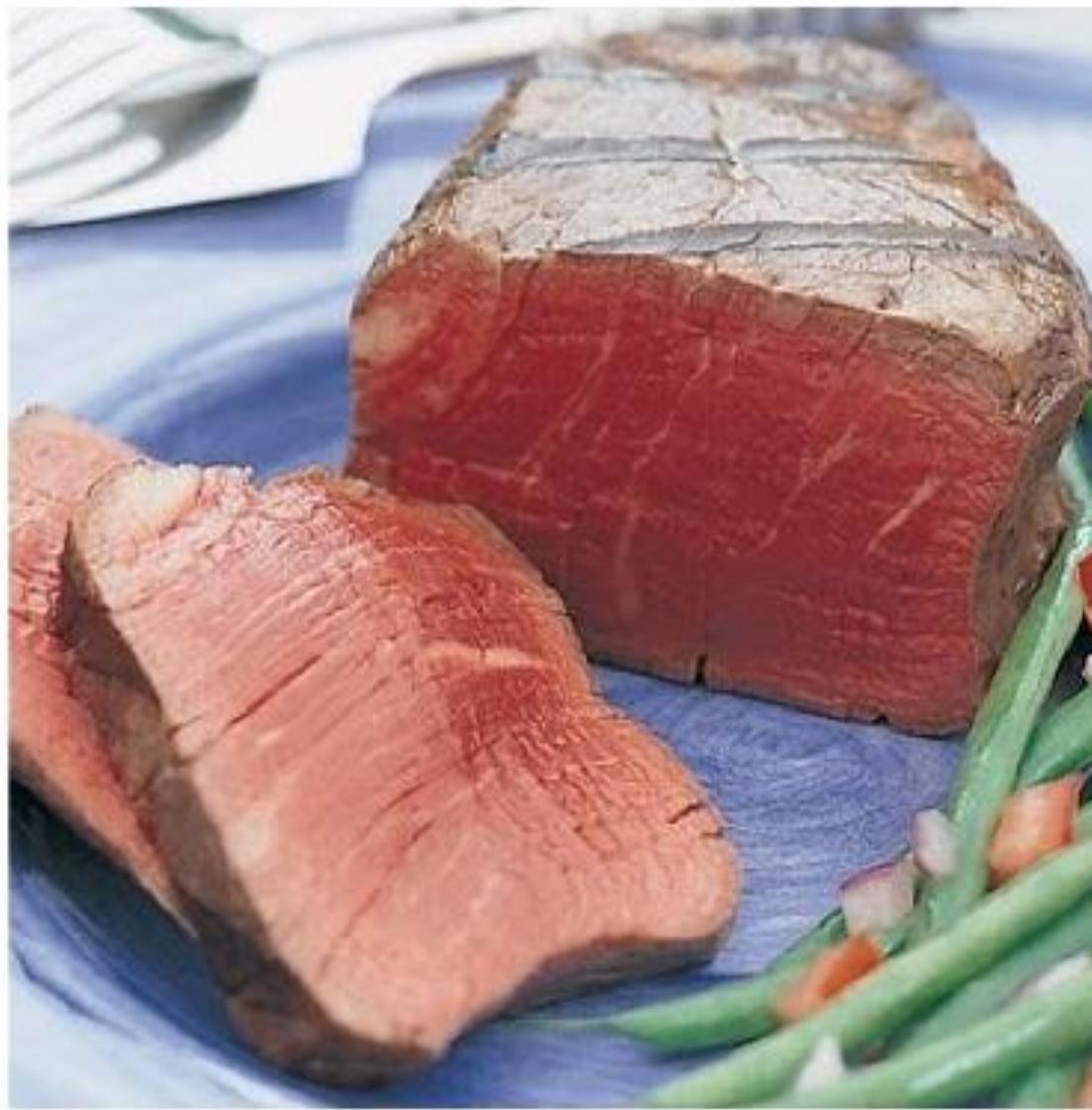
StEP Variable	Score
Radicular pain in the straight-leg-raising test	7
Abnormal response to cold temperature (decrease or allodynia)	3
Abnormal response to pinprick (decrease or hyperalgesia)	2
Abnormal response to blunt pressure (decrease or evoked pain)	1
Decreased response to vibration	1
Dysesthesia (any)	1
Temporal summation	-1
Burning or cold quality of the pain	-1
Abnormal response to brush movement (decrease or allodynia)	-2
Ongoing pain	-2
Skin changes (any)	-3

Scores reflect the regression coefficients of grouped StEP items; for example, a score of 2 was given when the response to pinprick was decreased or when pinprick evoked a hyperalgesic response. StEP items with a regression coefficient of 0 (zero) are not listed. A higher score is indicative of radicular LBP (see Table 3).

doi:10.1371/journal.pmed.1000047.t002

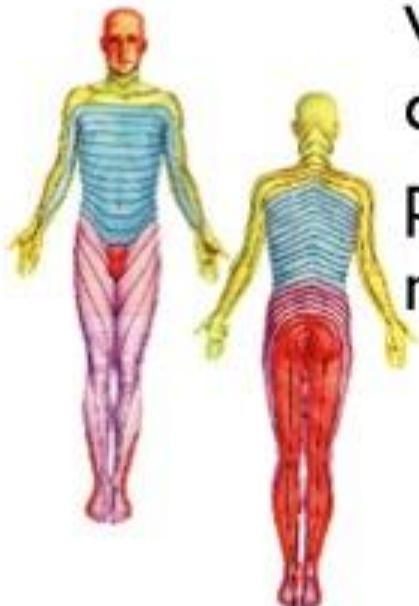
Dor axial

- Dor Lombar Radicular
- Lassègue
- Alodinia ou hiperpatia Dor Lombar AXIAL
- Déficit de sens. ao frio
- Déficit sens. tátil dolorosa



Dor Referida X Irradiada

- Referida:
Convergência das vias aferentes cutâneas e profundas de um mesmo segmento
- Irradiada:
É sentida provocada por irritação direta de um nervo sensitivo ou misto. ente no território correspondente à raiz nervosa estimulada – superficial e profunda



Dor

Referida & Irradiada & Axial & Apendicular

Intensa

Alodínea

Hiperpatia

Queimação

Formigamento

Dor Axial Referida/ Irradiada

Mulher de 54 anos,

Ca Colon 5 anos, s/ pulmão E

Dor e nenhum movimento no MID

Dor contínua, intensa em queimação formigamento

Dor em choque inúmeras vezes durante todo o dia no MID

Alodinínia e hiperpatia em todos os dermatomos do MID.

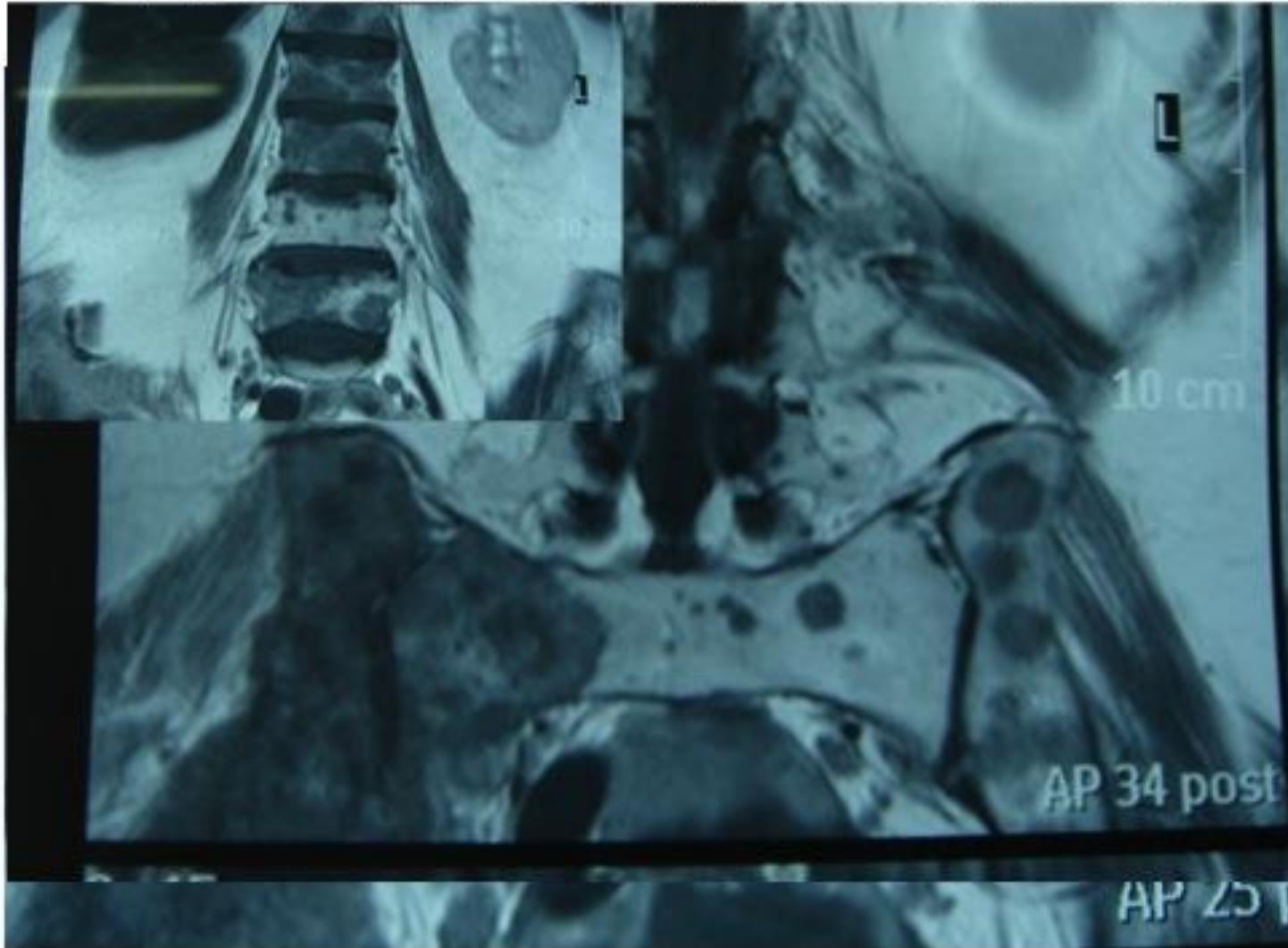


The Headache

Gillray Sculpsit 1801

Dor Axial

Referida/ Irradiada



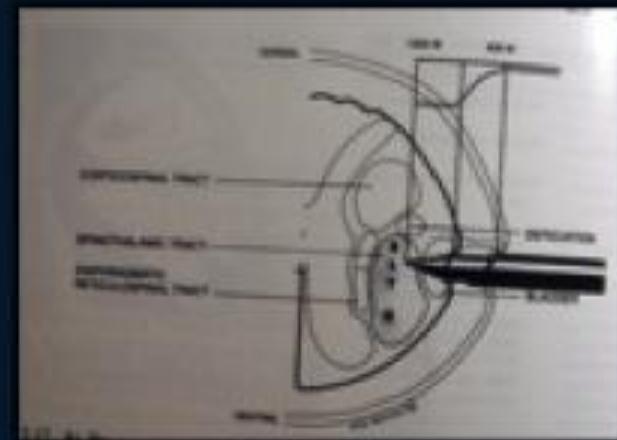
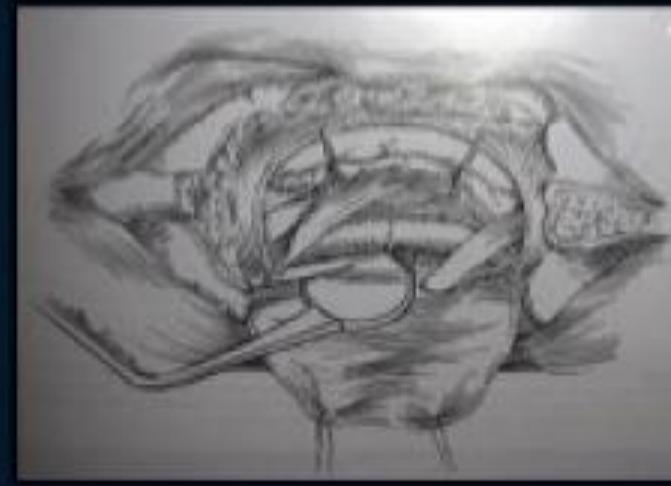
Cordotomia/ Indicações

“ Em doenças que estimulam nociceptores e trafegam pelo TETL, como dor do câncer, invasão do plexo braquial ou lombo-sacro; impulsos ectópicos em dores neuropáticas (dor lacinante/choque, alodínea/hiperpatia)”

Tasker e North, 1997

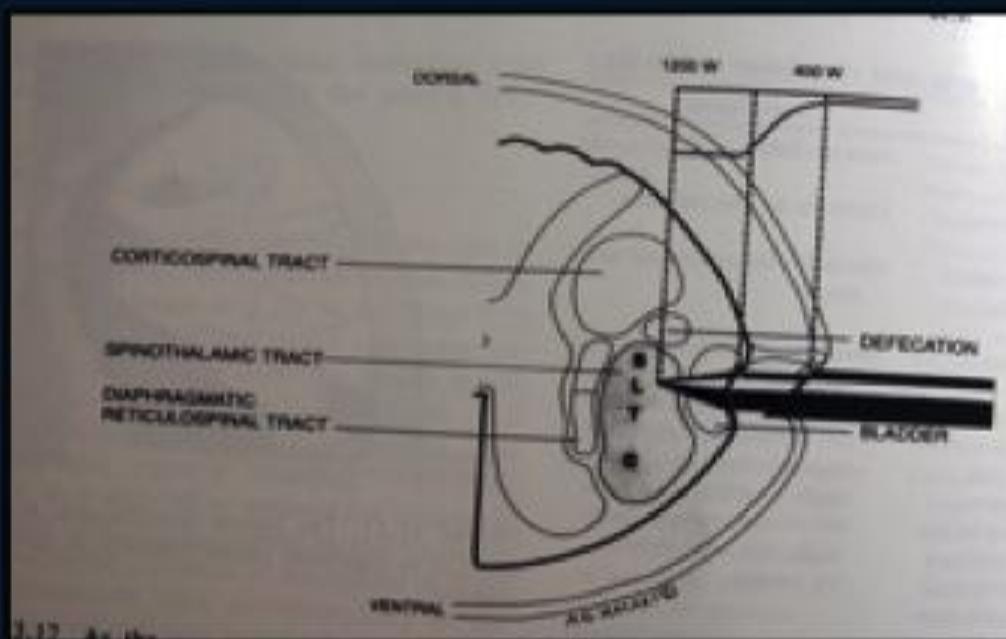
Cordotomia/ Histórico

- 1905 – Spiller e Martin – aberto
- 1963 – Mullan e cols – percutânea com estrôncio
- 1965 – Rosomoff – RF
- 1969 – Gildenberg – Impedância
- 1973 – Hitchcock – fisiologia
- 1973 – Tasker – fisiologia
- 1989 – Kampolat – TC



Cordotomia/ Contra-Indicação

- Unilateral - quando há acometimento de um pulmão
- Bilateral - síndrome de Ondine



Cordotomia/Complicações

- Horner 23%
- Disfunção vesical 3,5%
- Incontinência intestinal 2,1%
- Dist respiratórios 1,2%
- Paresia e ataxia 1%
- Mortalidade 0,3%

❖ **Bilateral** – 12 a 58% disfunção vesical
– Síndrome de Ondine

Cordotomias ântero-laterais

- Unilateral

ginecológico	236
proctológico	186
Urológico	212
mama	124
pulmão	142
outros	85
total	985



90% Satisfatórios

Hemiparesia 2%

Disfunção urinária 3%

Teixeira MJ

- Dor neoplásica
- Dor unilateral*
- Membro inferior, pelve, abdôme e tórax
- !!! Membro superior
- Ausência de anormalidades ventilatórias

Aterior Cordotomy

C5-C6

Bilateral

Ca Ginecológico - 16

Proctológico - 11

Urológico - 09

Outros - 06

Total - 42

Alt desempenho sexual 5%

Sindrome de Ondine 0,25%

Lin PM, Gildenberg PL, Polakoff PP. An anterior approach to percutaneous lower cervical cordotomy. J Neurosurg 1966 Nov; 25(5):553-60.

Aterior Cordotomy C5-C6 - CT-Guided



Among the 1335 Medline citations for cordotomy, only 42 of them were articles published after 1995 that included true cordotomy procedures, whether CT-guided or not. Of these, five articles were related to high cordotomy complications, but none of them were related to low cordotomy. Another 33 were reports of upper cordotomy or review articles, none of which mentioned the number of low anterior cordotomy performed. One article presented MRI guidance in high cordotomy.

In the best of our knowledge, only two papers have described the CT-LCC technique. Fenstermaker et al² presented the first six patients, Raslan operated another eight patients, and finally this report, presenting a single case.

Patient Sex	Pathology	Pain localization	Pre operative pain severity (VAS)	Level of lesion	Level of anesthesia	Pos operative pain severity VAS	Complications
M	Hypernephroma metastatic to spine and both hips	Spine and both hips	NA	C1-C2 C5-C6	NA	NA	Permanent bladder dysfunction
F	Ovarian carcinoma	peritoneum	NA	C1-C2 C6-C7	NA	NA	None
M	Lung carcinoma	Chest wall and leg	NA	C1-C2 C5-C6	NA	NA	None
F	Osteosarcoma	Hip and leg	NA	C5-C6	NA	NA	Transient bladder dysfunction
M	Osteosarcoma	Leg and spinal metastasis	NA	C5-C6	NA	NA	None
F	Carcinoma of breast	Chest wall and leg	NA	C6-C7	NA	NA	None
F	Mesothelioma	Right mammary pain	8	C4-C5	T1	3	NA
M	Metastatic adenocarcinoma of the lung	Left side of the chest	9	C5-C6	C8	0	NA
M	Mesothelioma	Left anterior and posterior chest	9	C4-C5	No anesthesia	8	NA
F	Mesothelioma	Right chest	8	C4-C5	T1	0	NA
F	Mesothelioma	Left chest	9	C5-C6	T1	2	NA
M	Mesothelioma	Left chest	9	C4-C5	No anesthesia	9	NA
M	Multiple myeloma	Chest and back	7	C5-C6	T1	2	NA
M	Multiple myeloma	Chest and back	7	C4-C5	T1	3	NA
F	Colon adenocarcinoma	Left leg	10	C5-C6	T1	4	None

TKS

Santa Casa de Belo Horizonte

