

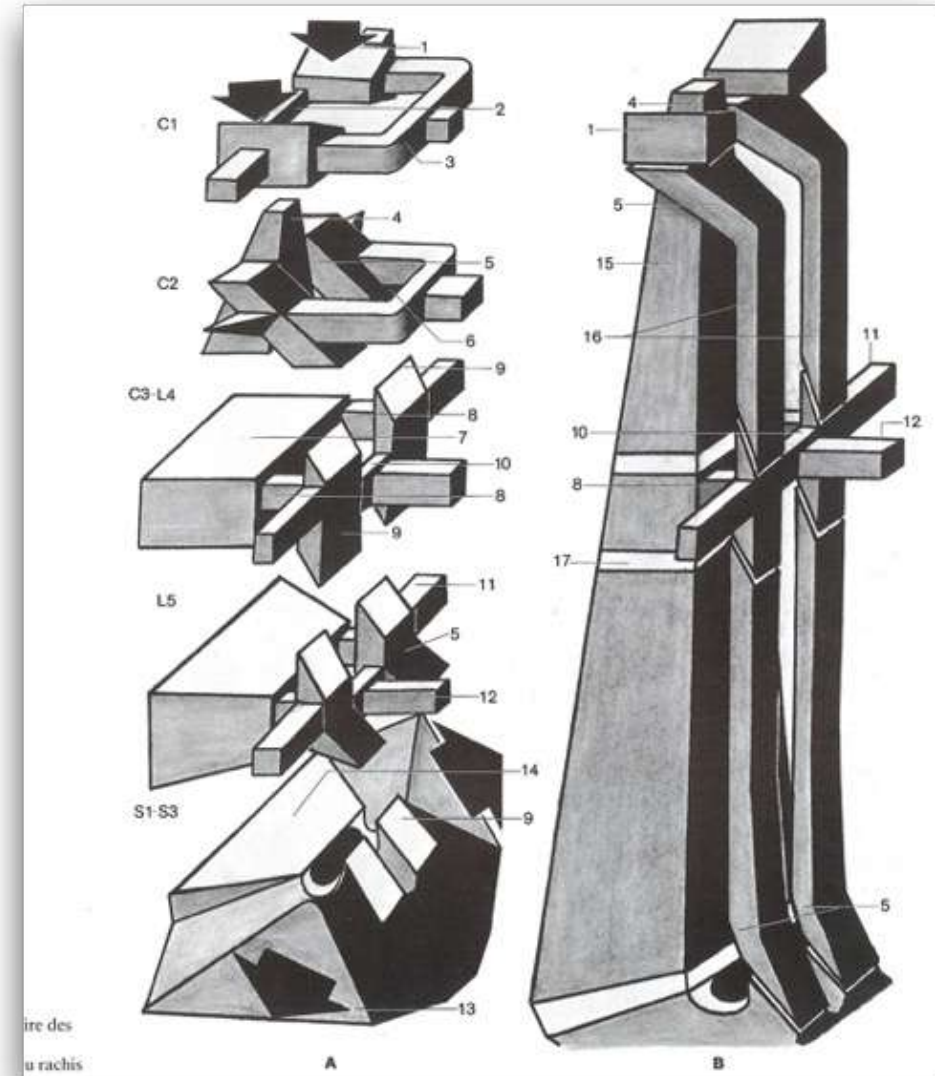
Canal lombaire étroit

Serge Troussel

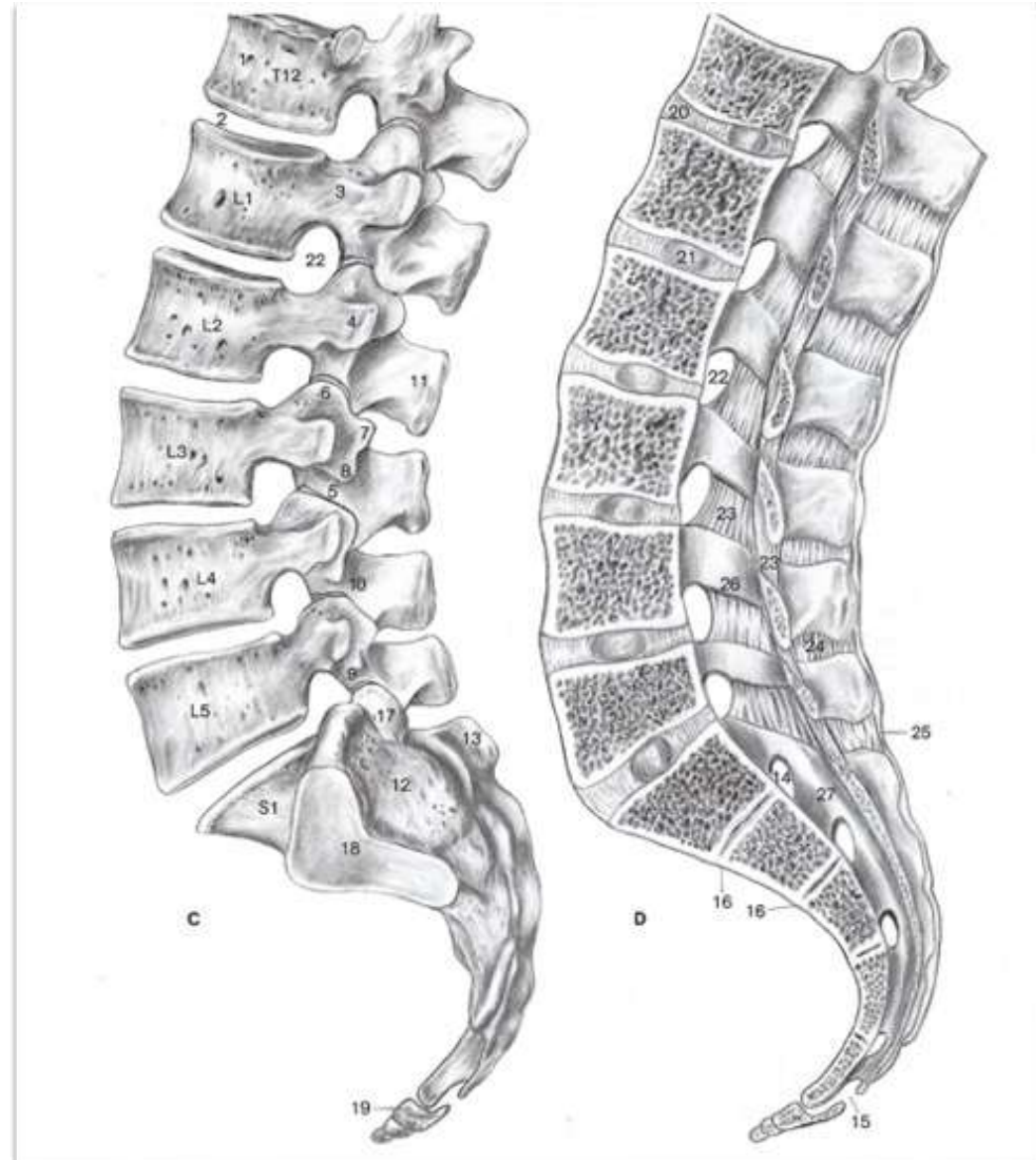
07 Juin 2024



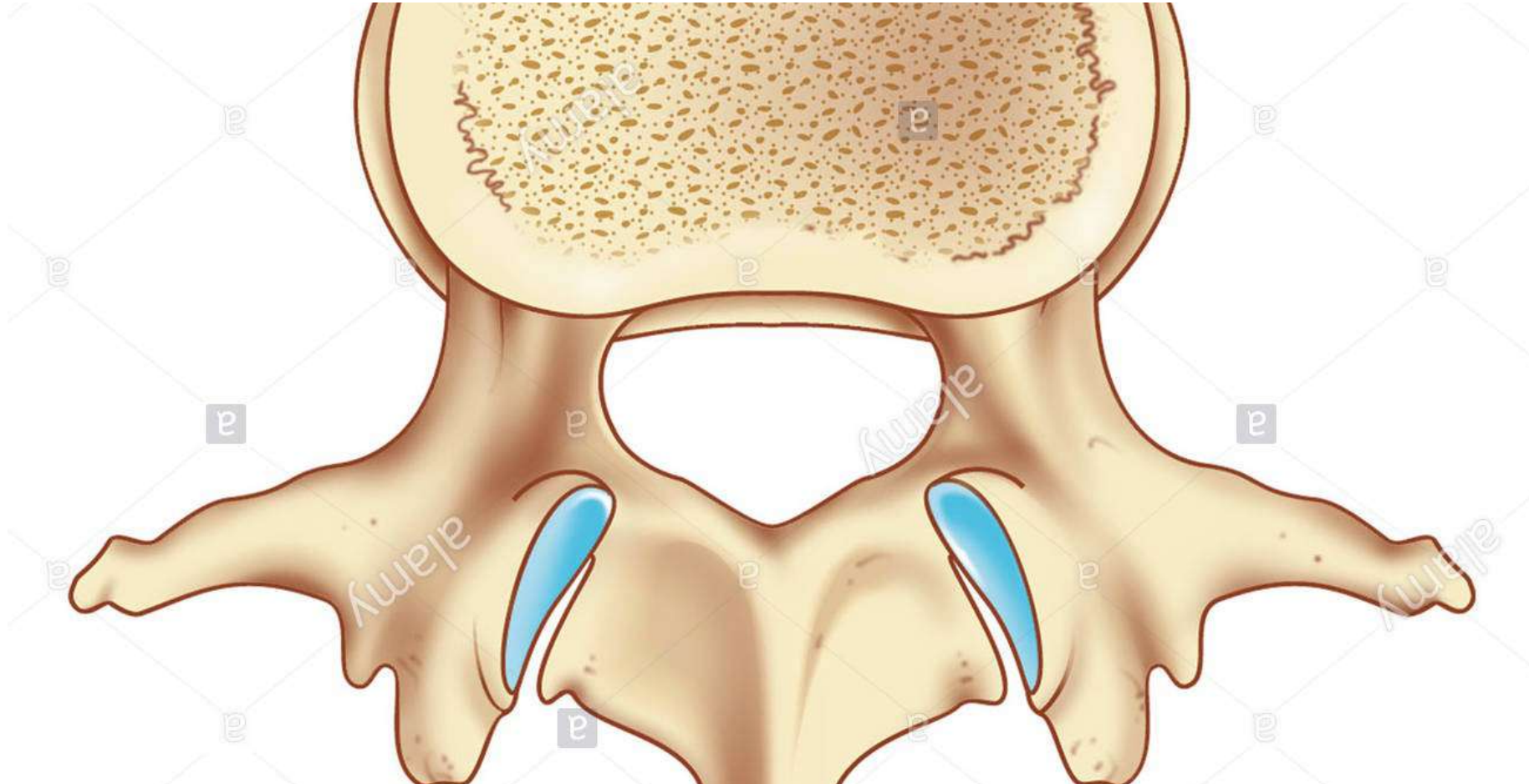
3 colonnes



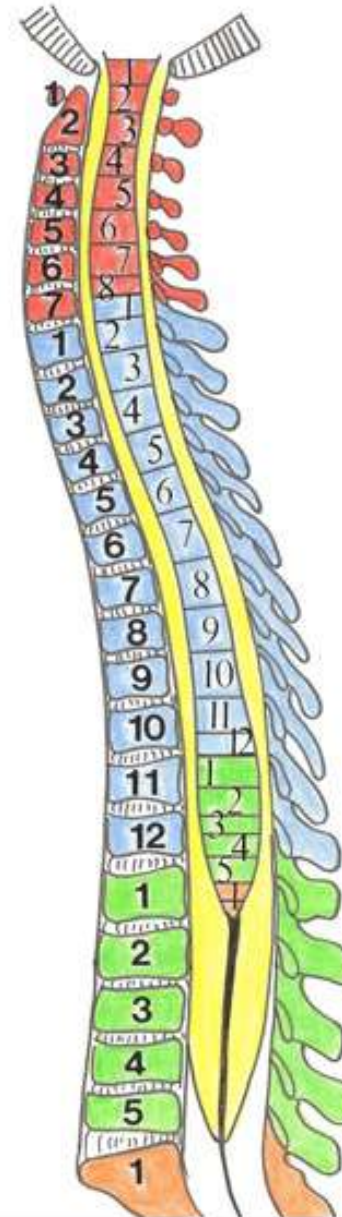
Vertèbre lombaire



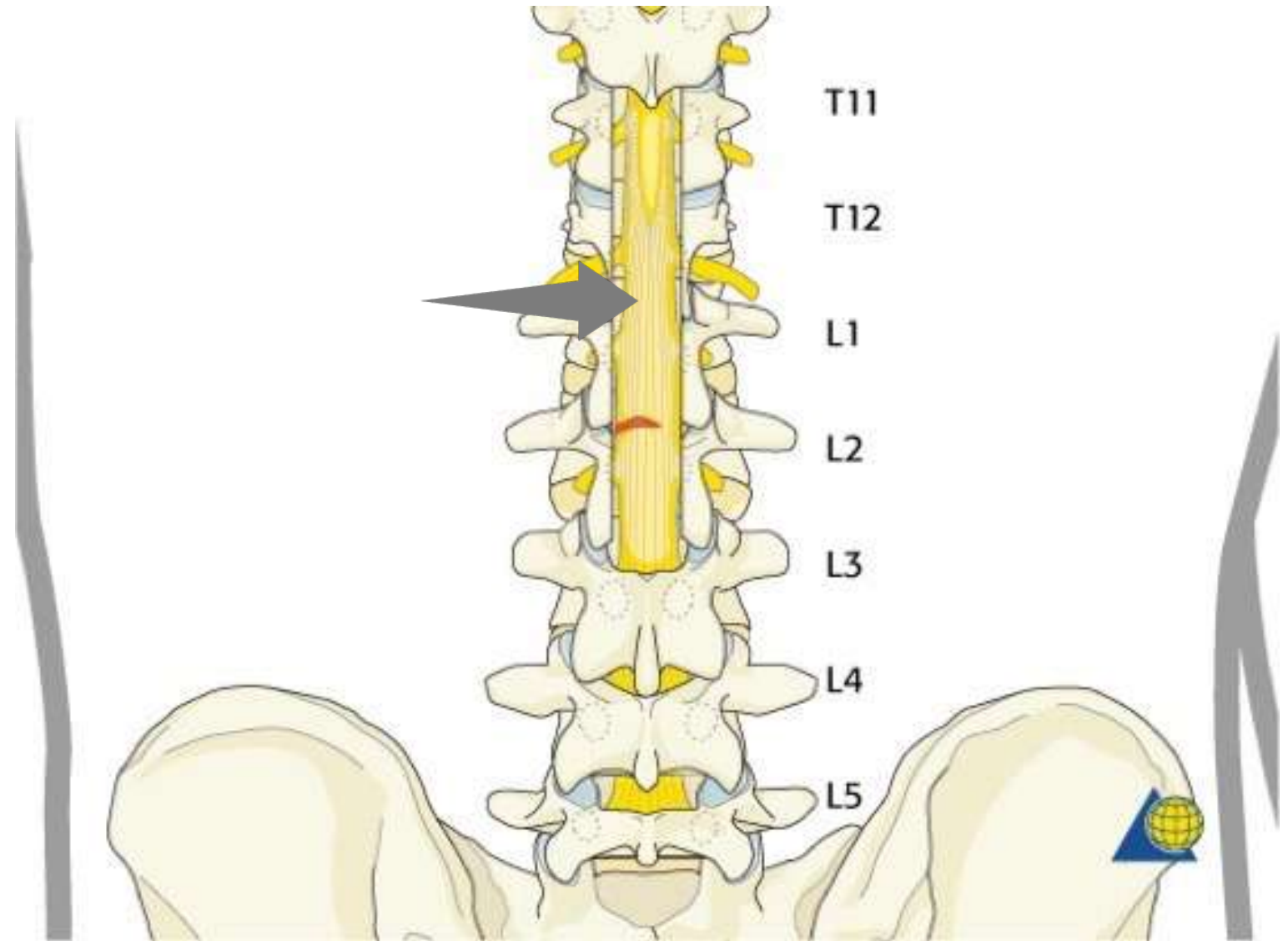
CANAL VERTEBRAL



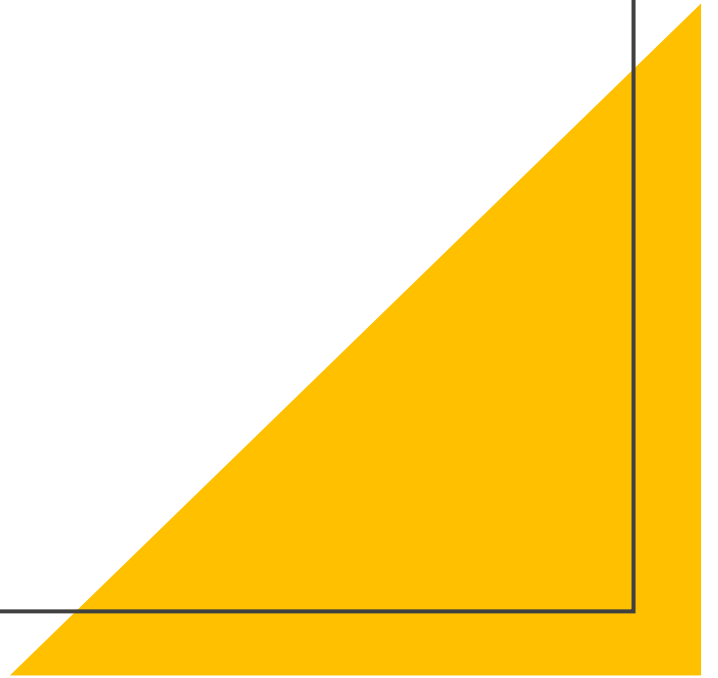
Moëlle épineière



QUEUE CHEVAL



Canal lombaire
étroit

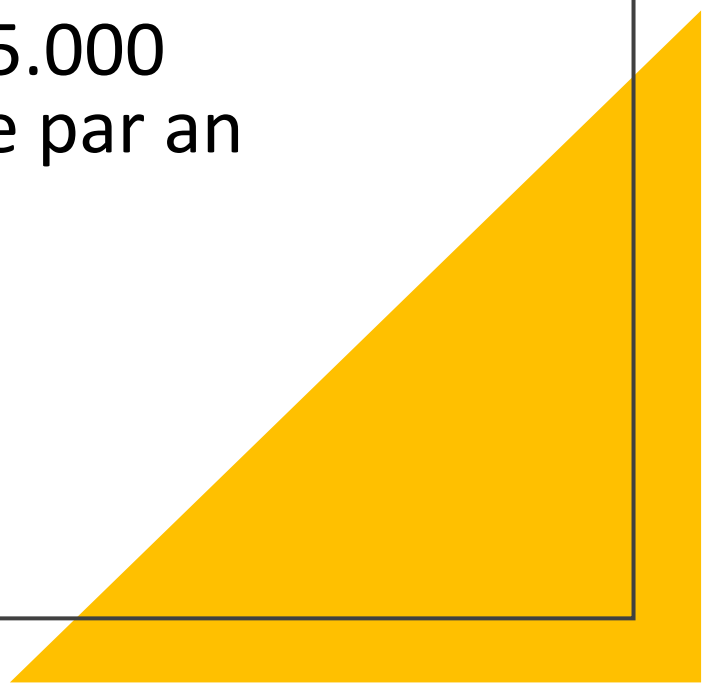


Definition

- Le canal lombaire étroit est une description radiologique d'une pathologie qui se manifeste cliniquement par un syndrome de claudication intermittente neurogène et dont le diagnostic est avant tout clinique

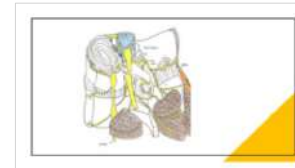
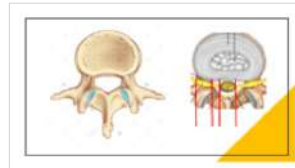
Epidémiologie

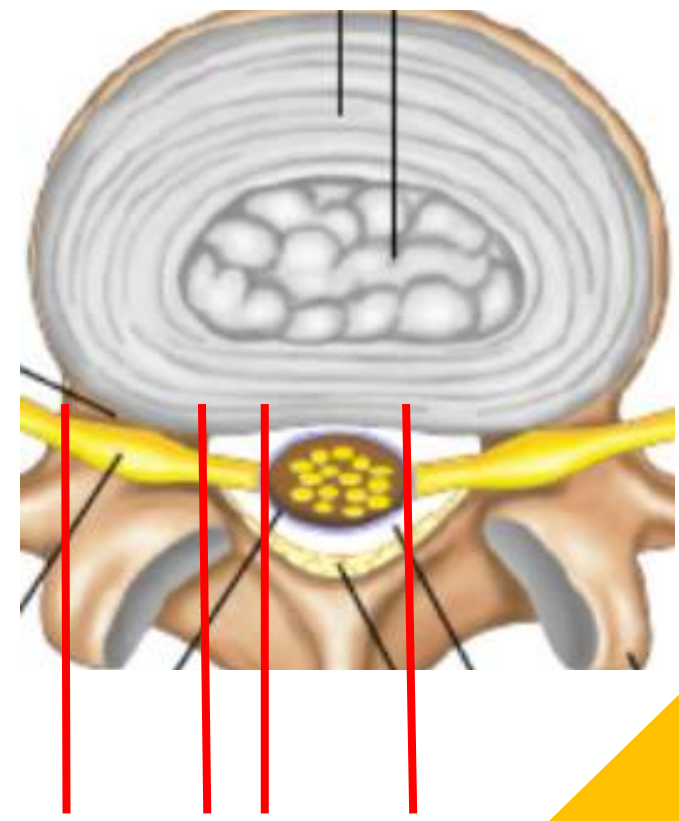
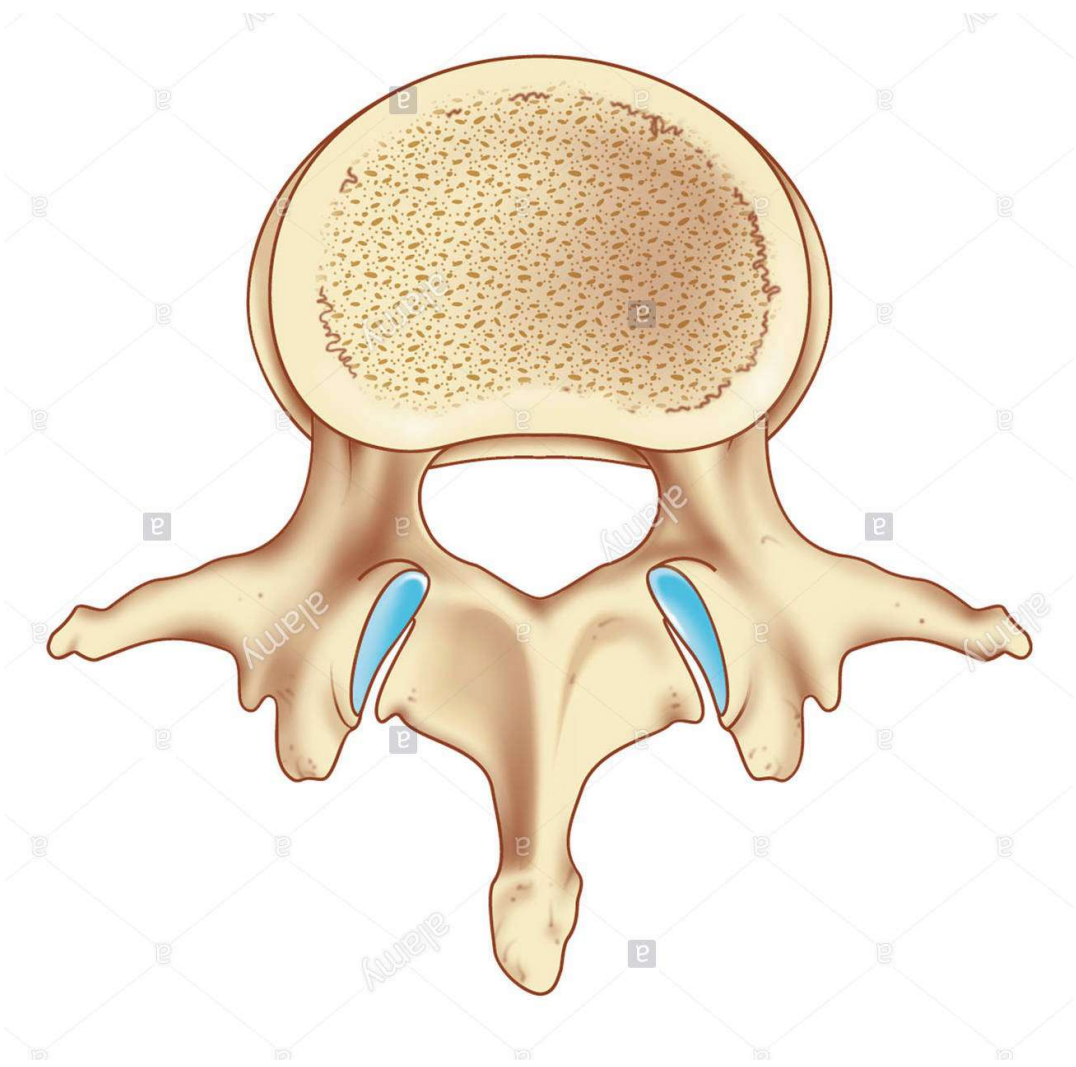
*qui est
concerné?*

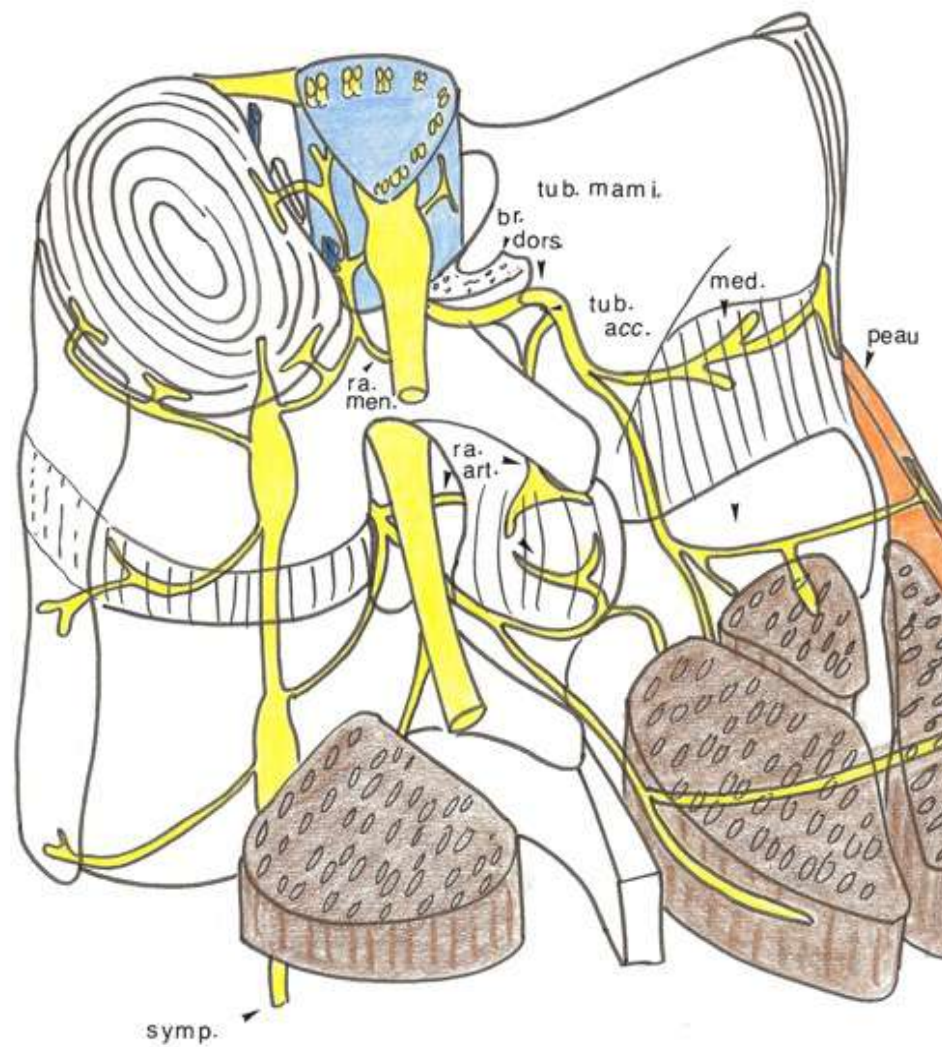
- Prévalence: 9,3%
 - Ratio H/F identique
 - Spondylo dégénératif 70% F
 - On opère environ 15.000 patients en Belgique par an (2016)
 - Âge moyen 65 ans
- 
- A large yellow triangle is positioned in the bottom right corner of the slide, pointing towards the top right.

Definition

- Sténose centrale
- Sténose latérale
- Sténose foraminale







Etiologie

Congénitale, dysplasique

Dégénérative

Autres: lipome, kyste, neo

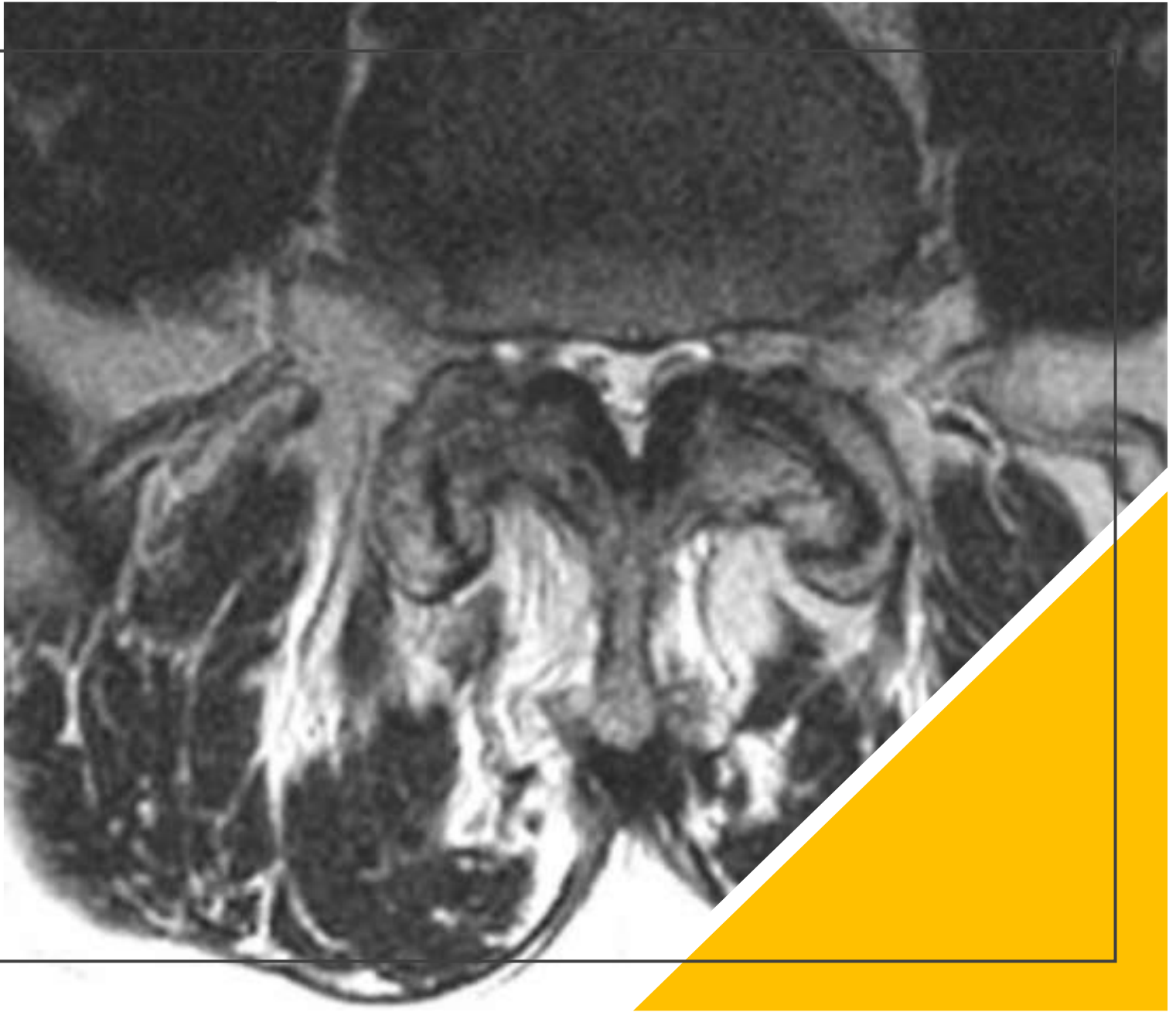
Post trauma

Métabolique: Paget, S.A



Spondylolisthesis dégénératif





Spondylolisthesis par lyse isthmique

Pas de sténose
centrale!!

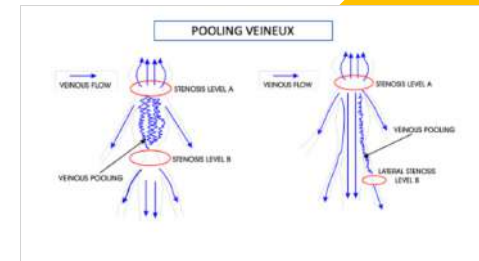




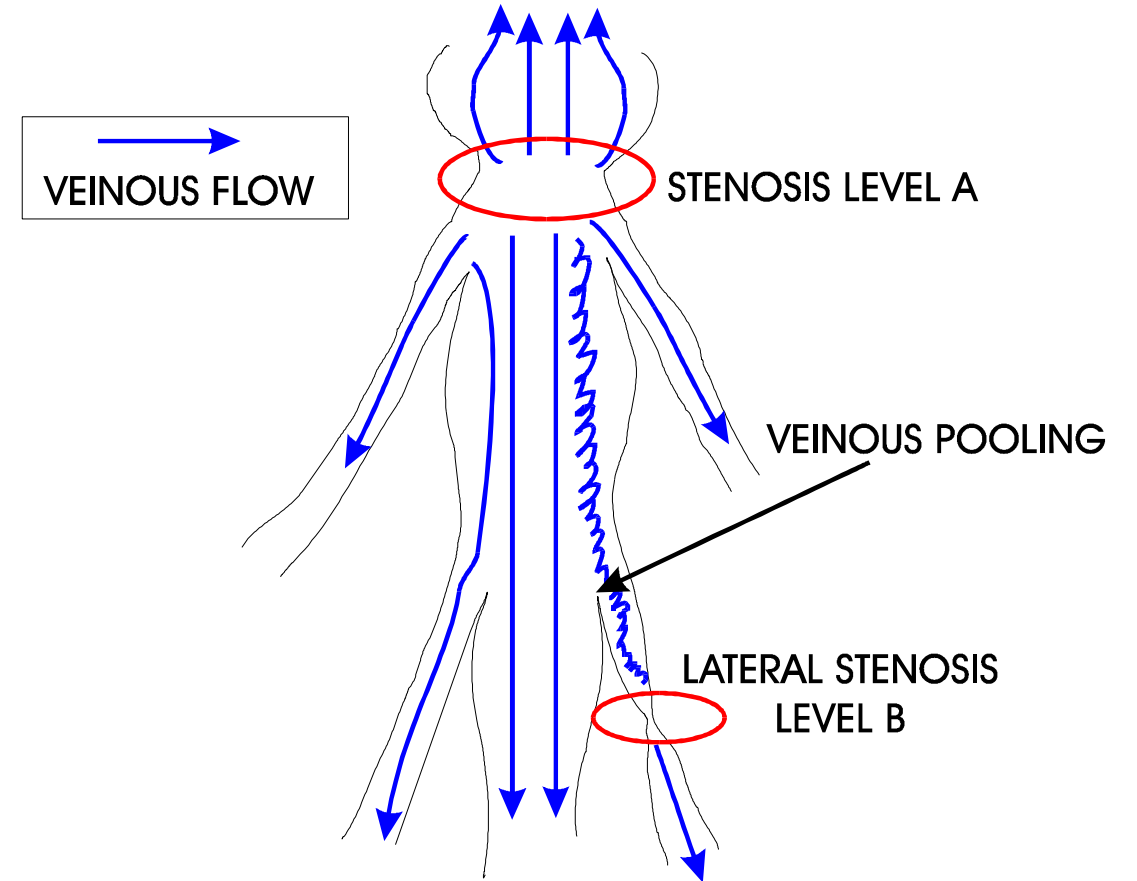
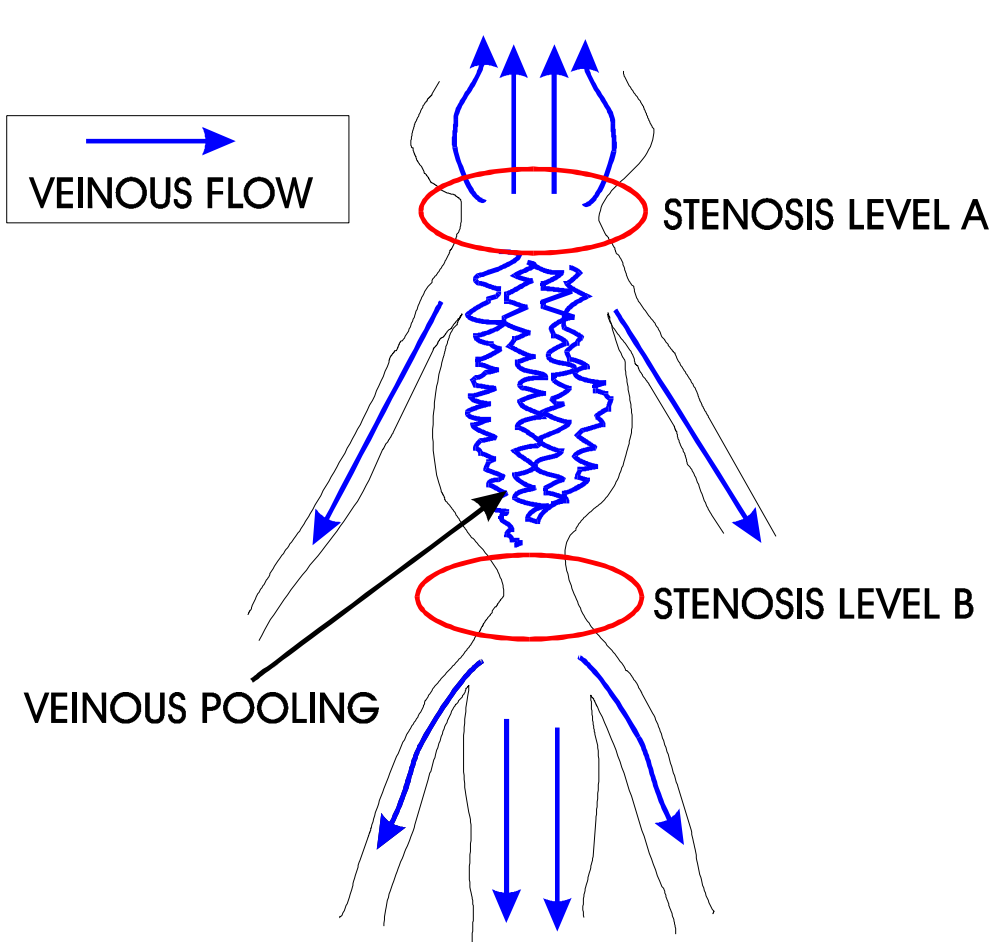


Pathogenie

- Compression mécanique
- Vasculaire:
 - ischémie
 - > pression intrathécale, congestion veineuse



POOLING VEINEUX



Clinique

- Douleur lombaire et radiculaire
- Réduction périmètre de marche
- Flexion antérieure
(*Camptocormie*)
- Troubles sphinctériens

Diagnostic différentiel

- Vasculaire
- Polyneuropathie distale
- Dégénératifs m.inf, tendinopathie
- Malformation vasculaire endo ou peri medullaire

Comparison of symptoms in neurogenic and vascular classification

Symptoms	Neurogenic	Vascular
Quality	Asymmetric/tingling/burniness	Pain/cramping/tightness
Increased with walking	Yes	No
Relieved walking	No	Yes
Relieved with a rest	Yes	No
Relieved standing erect	No	Yes
Relieved sitting/lying	With rest	Immediate
Increased walking with flippers	No/Yes	No
Increased walking	No/Yes	No
Increased sitting/lying	No	No
Increased standing	Yes	No
Increased sitting/lying	No	No

Comparison of symptoms in neurogenic and vascular claudication

Symptoms	Neurogenic	Vascular
Quality	Pain/numbness/tingling/weakness	Pain/cramping/tightness
Increased with walking	Yes	Yes
Relieved walking flexed with a cart	Yes	No
Relieved standing erect	No	Yes
Relieved sitting/lying	Within minutes	Immediate
Increased walking uphill/upstairs	No/less	Yes
Increased walking downhill	Yes/more	Yes
Increased biking/back flexed	No	Yes
Increased biking/back extended	Yes	Yes

Diagnostic

- IRM
 - Normal: 130 mm²
 - Modéré: 100 mm²
 - Sévère: 75mm²
 - Disparition lcr intrathécal
- EMG: facultatif

Traitements

- Conservateurs

Ains

Kiné

(Infiltrations)

- Chirurgicaux

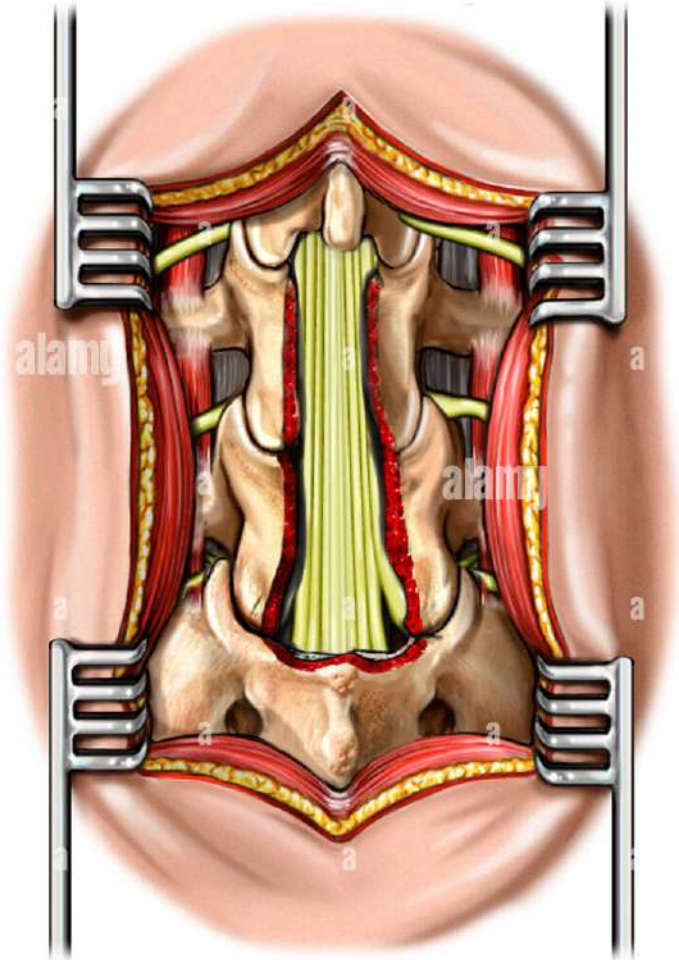
Laminectomie

Laminoplastie

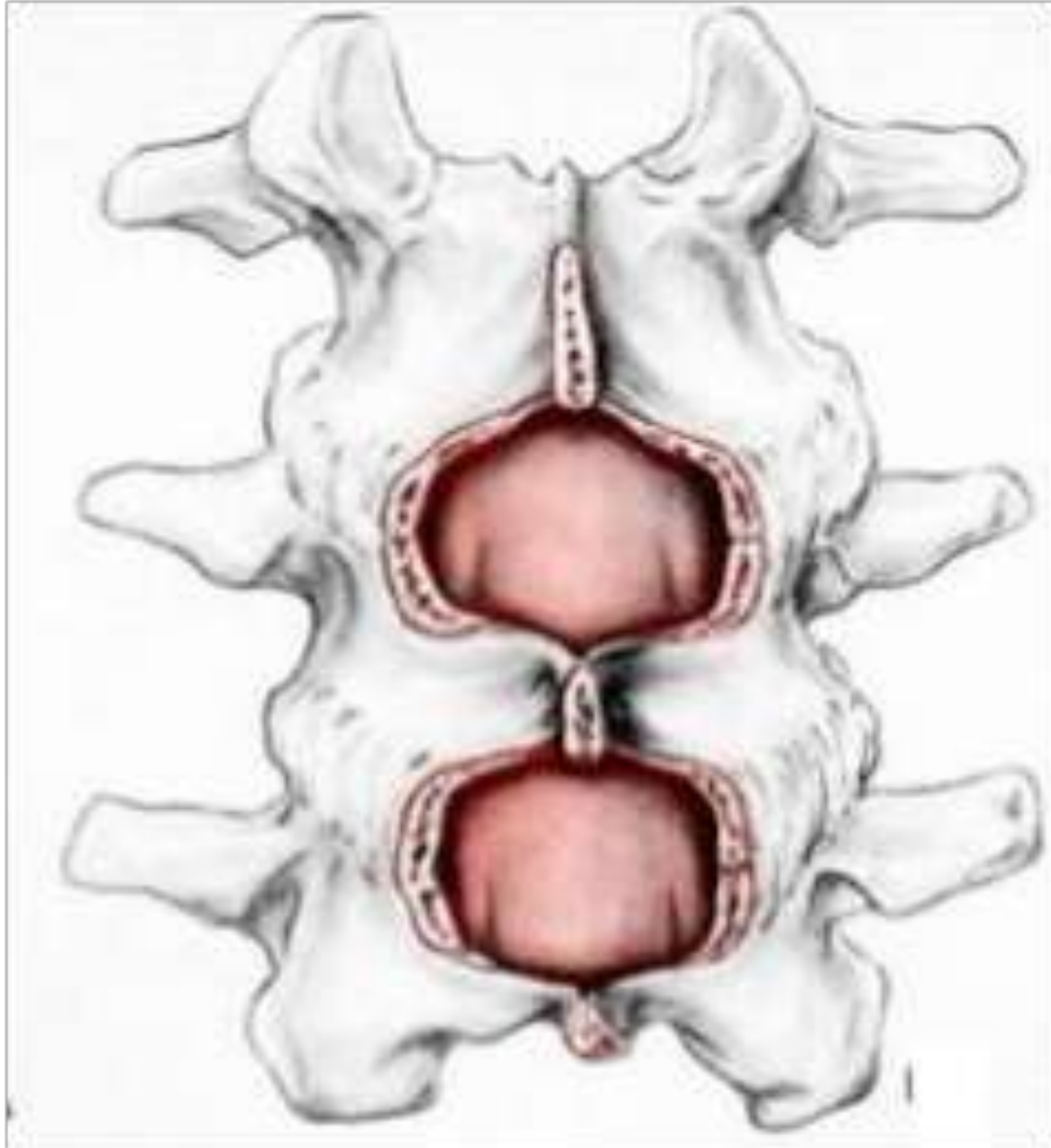
Recalibrage

Recalibrage minimal invasive

Endoscopie



Laminectomie



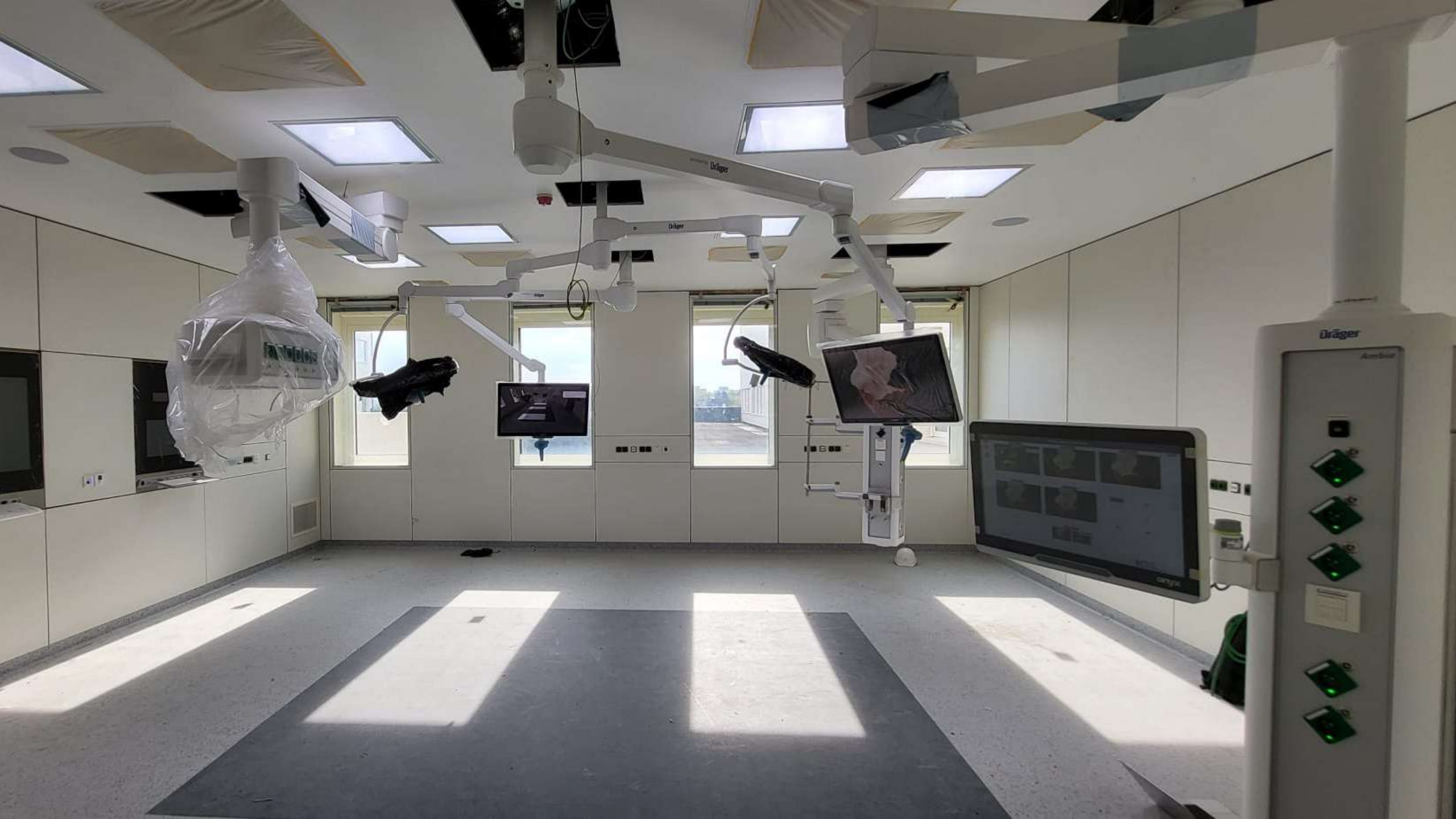
Recalibrage
selon Senegas

1

voie d'abord



Recalibrage
endoscopique



ARTHRODESE ?



Critères rationnels de fusion

Instabilité Clinique

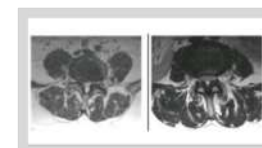
Instabilité radiologique

Plan sagittal des articulaires post !

Bonne conservation de la hauteur discale !

High pelvic and sacral tilt !

Faiblesse musculaire et obésité





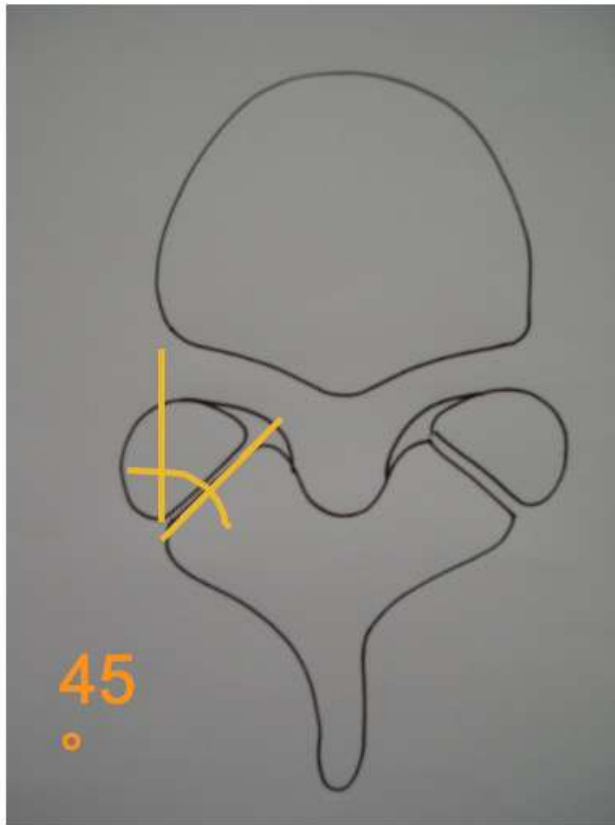
De

Df

$$\underline{De + Df > 3\text{mm}}$$

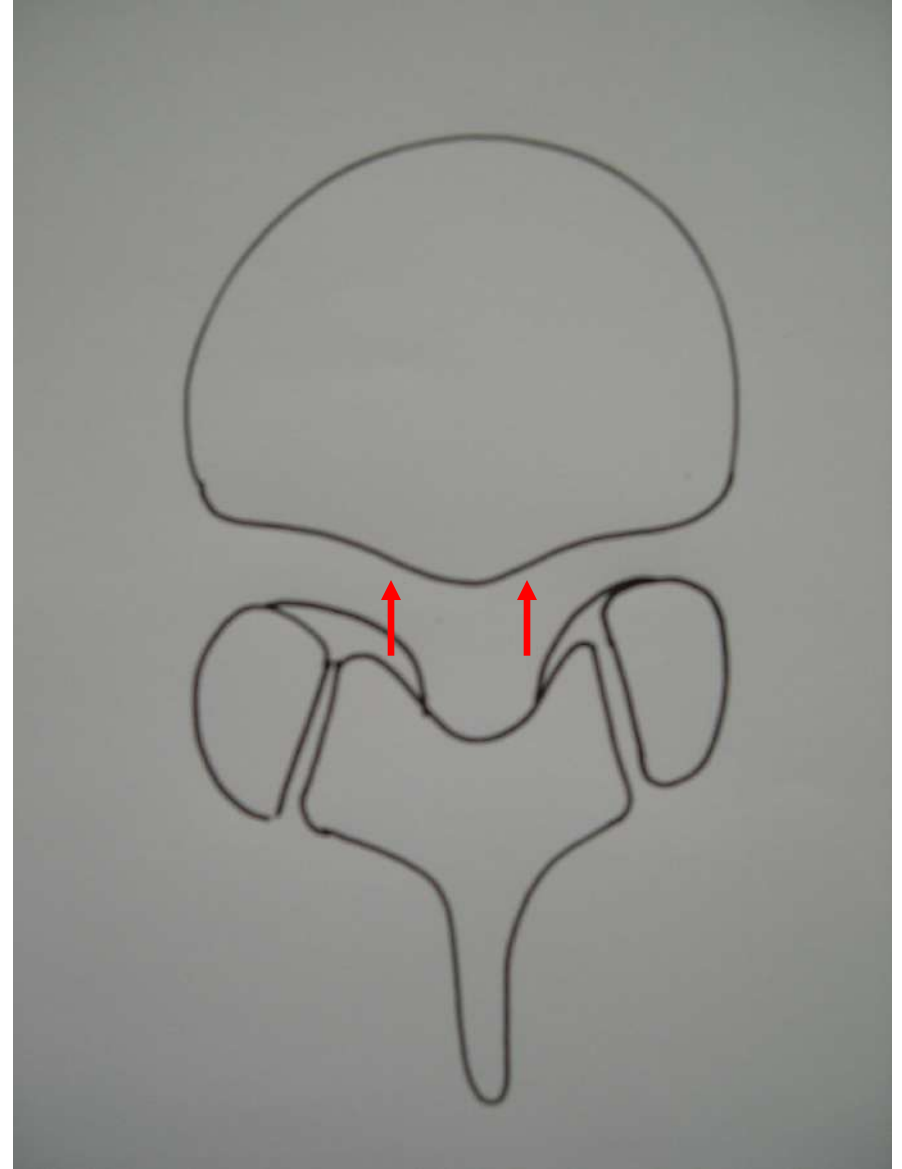
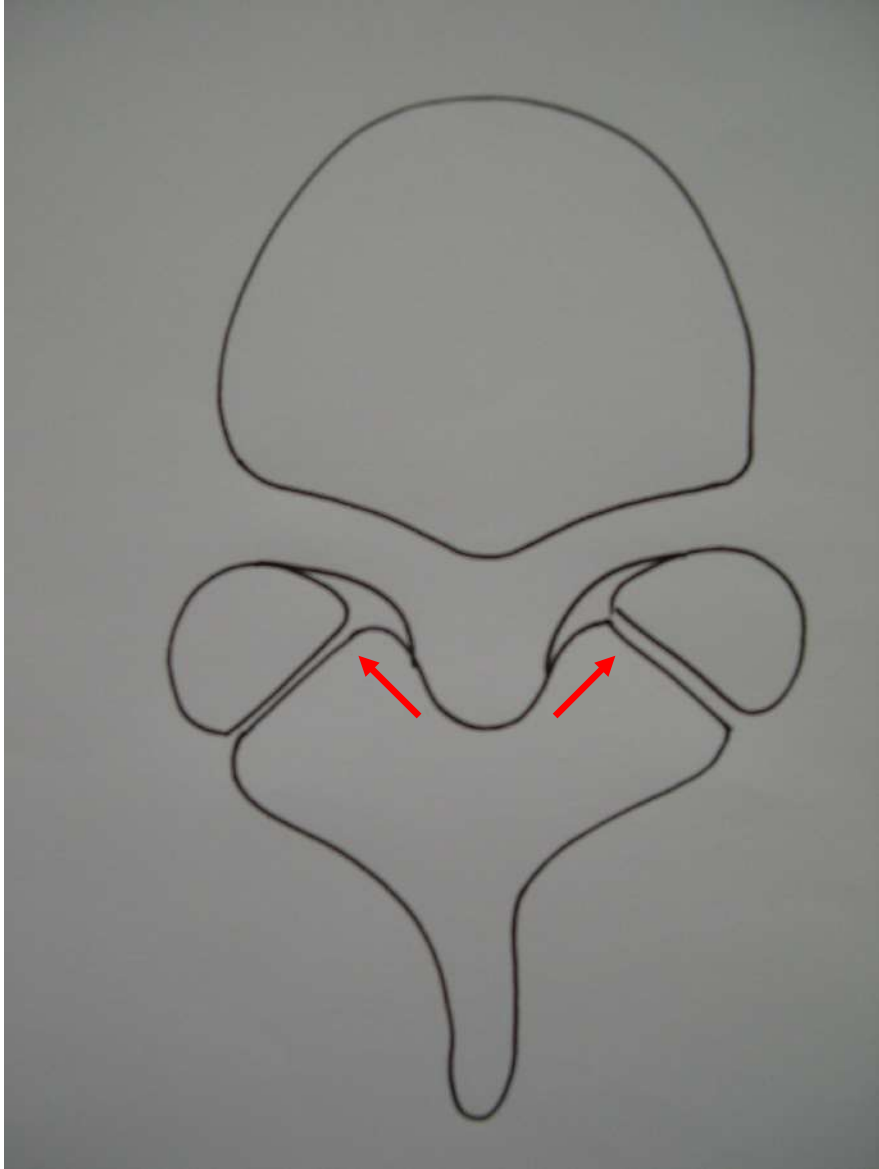
Interligne articulaire postérieur

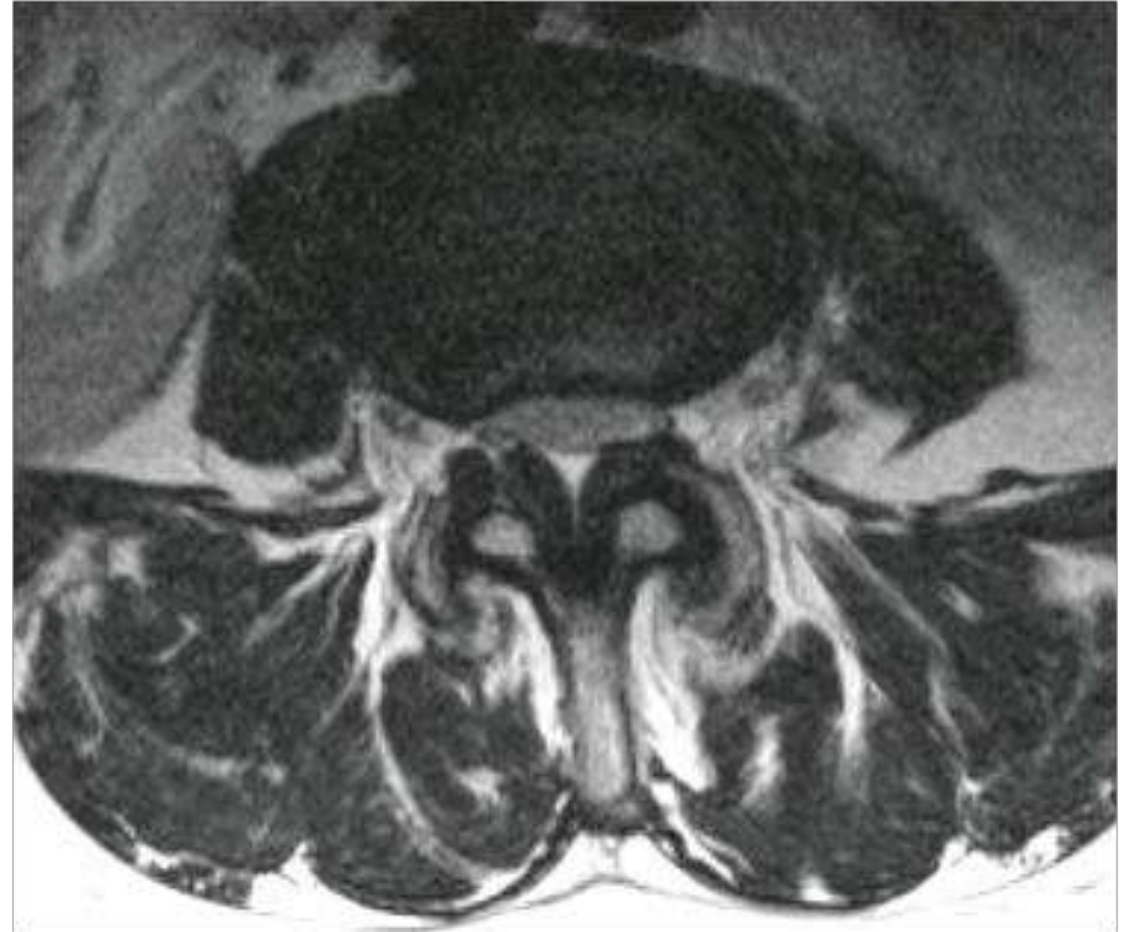
standard



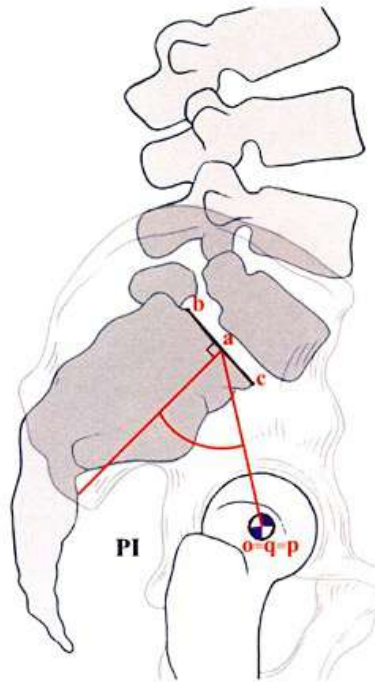
sagittal



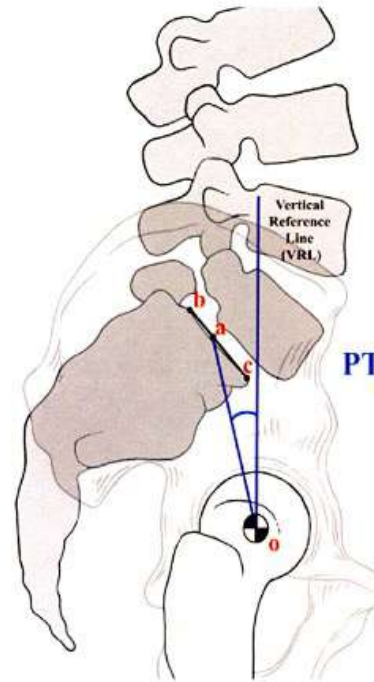




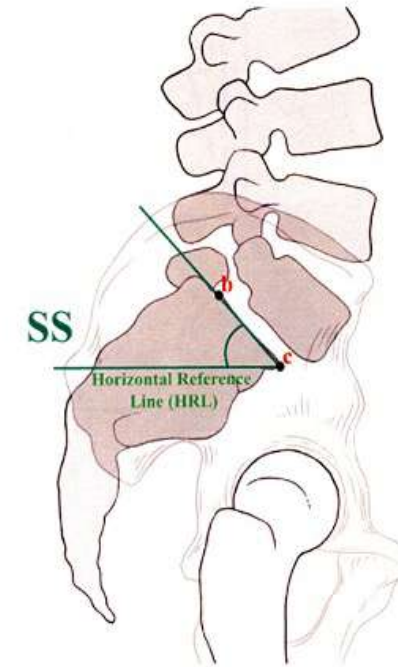
Incidence angle



Pelvic tilt



Sacral tilt



Sacral tilt ↗ → risk of slipping progression ↗

Complications 12%

- Hématome
- Neurapraxie
- Brèche dure mérienne (3-5%)
- Infection
- TVP
- Embolie

Ruigang Jia, Xin-Qiang Wang,
Yunpeng Zhang, and Shaokang
Hsueh

World Neurosurg, 2022

CONCLUSIONS: Minimally invasive laminotomy
decompression is an effective procedure and achieves
beneficial long-term clinical results for DLSS.



Long-term outcomes after minimally invasive bilateral or unilateral laminotomy for degenerative lumbar spinal
stenosis: A minimum 10-year follow-up study.