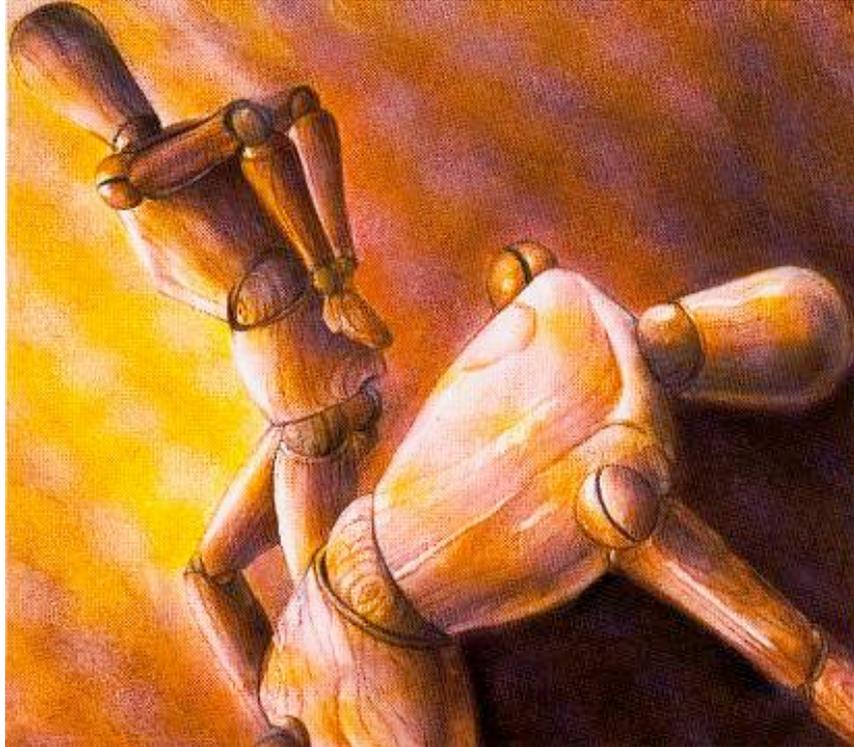


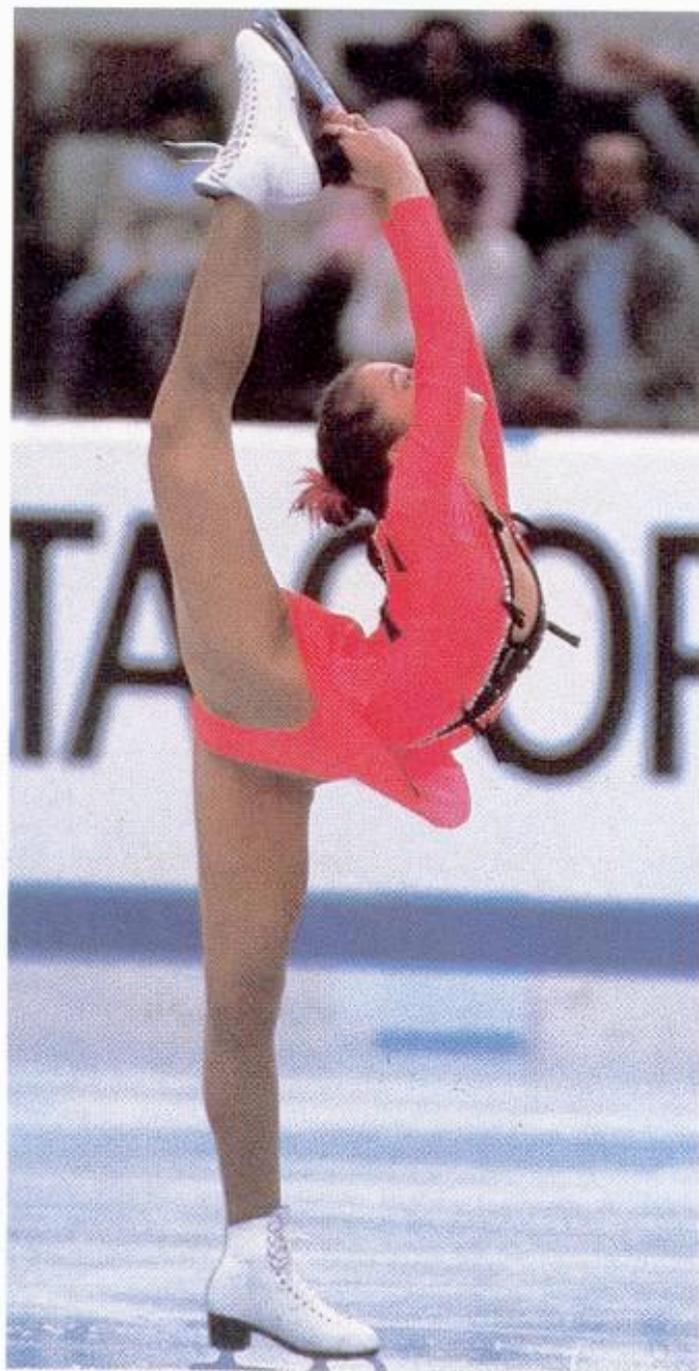
MTONDOS



Principe du verrouillage lombaire

www.mtondos.com

Attention



Alarmant

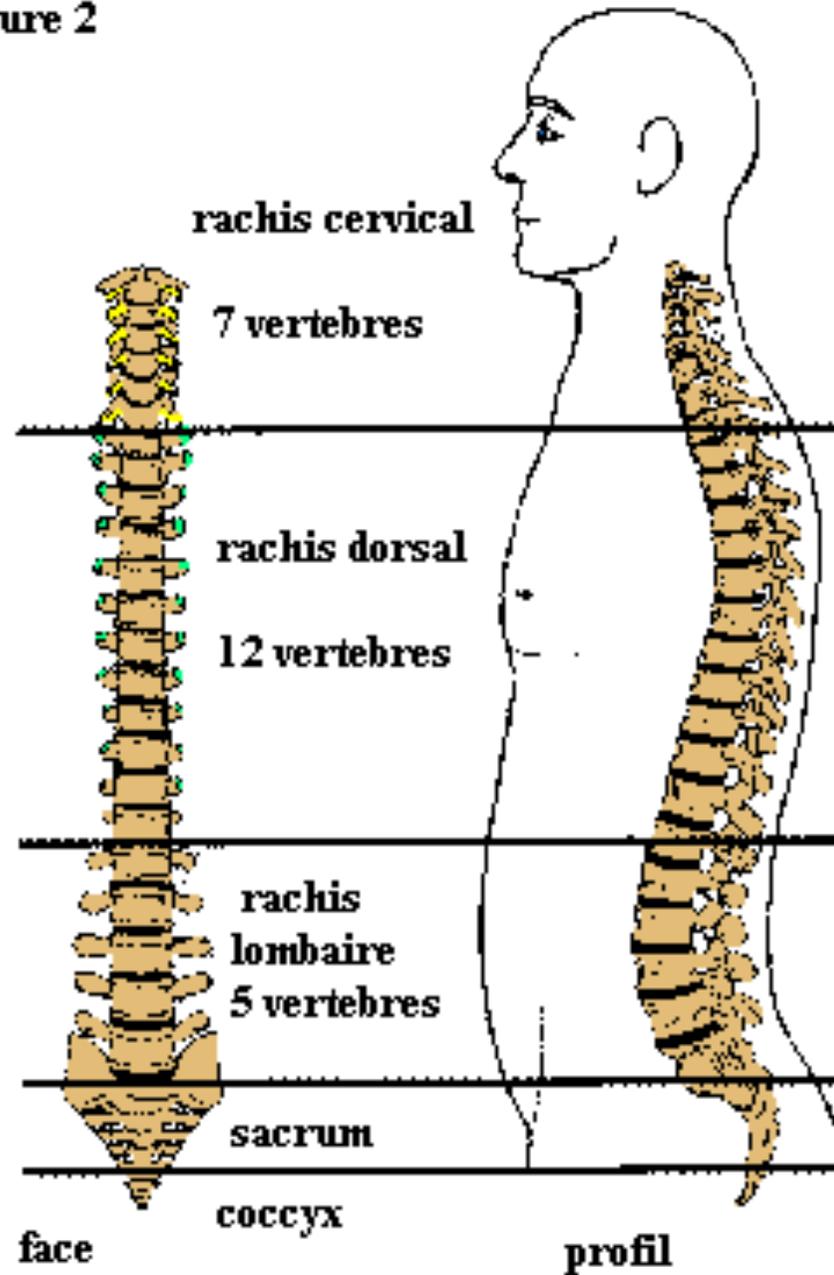


Grandes lignes

- Première cause d'arrêt de travail
- 3 600 000 journées de travail perdues, 110000 arrêts de travail en augmentation constante
- 500 millions d'euros
- Passage à la bipédie
- Nécessite une prise en charge volontaire
- Un dos est-il fragile?
- Pourquoi la douleur?

Colonne vertébrale

figure 2



Lordose lombaire

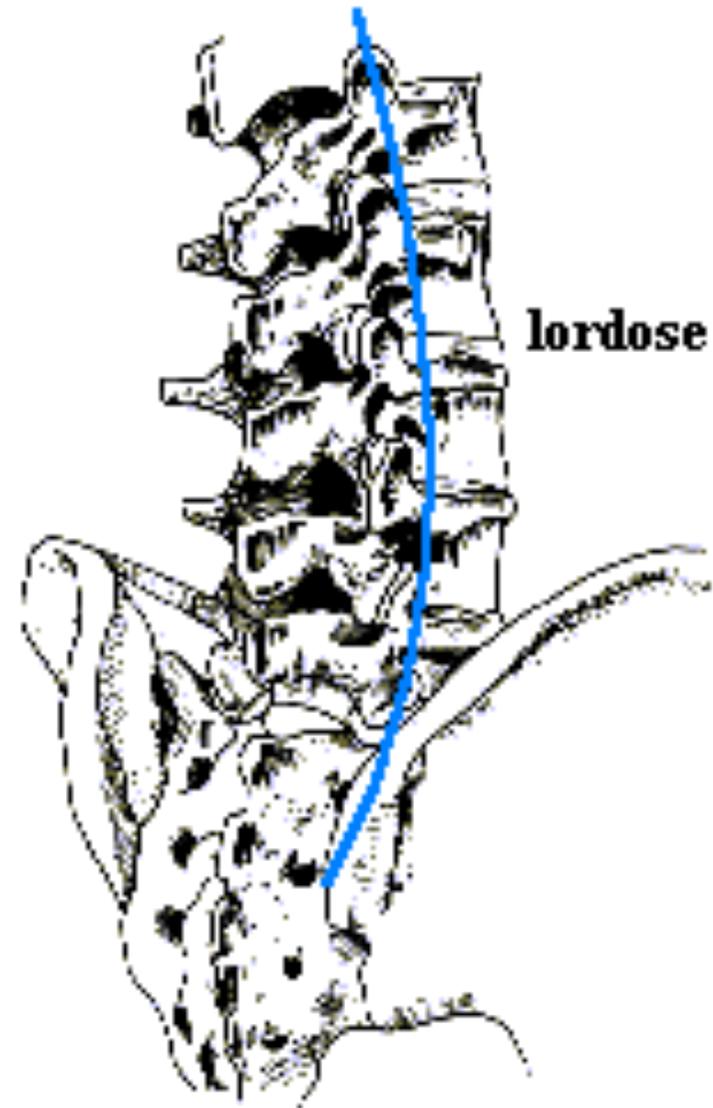


figure 4

Disque intervertébral

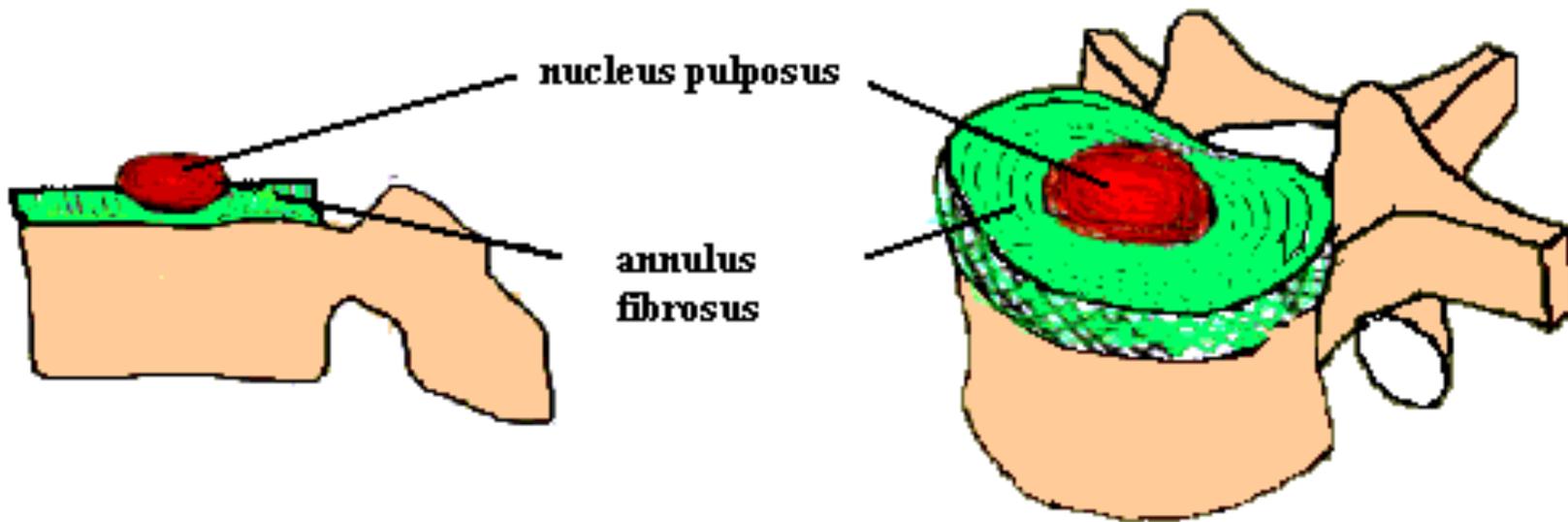


figure 1

Vertèbre lombaire

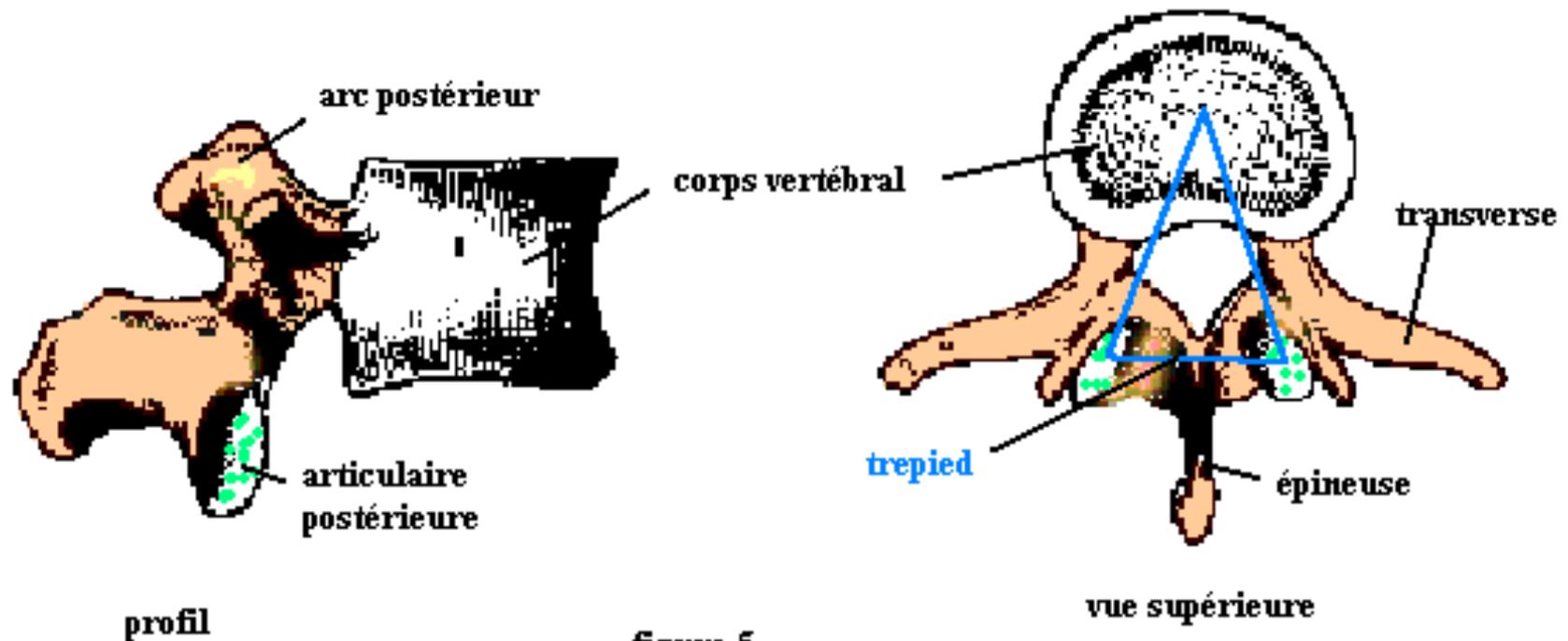
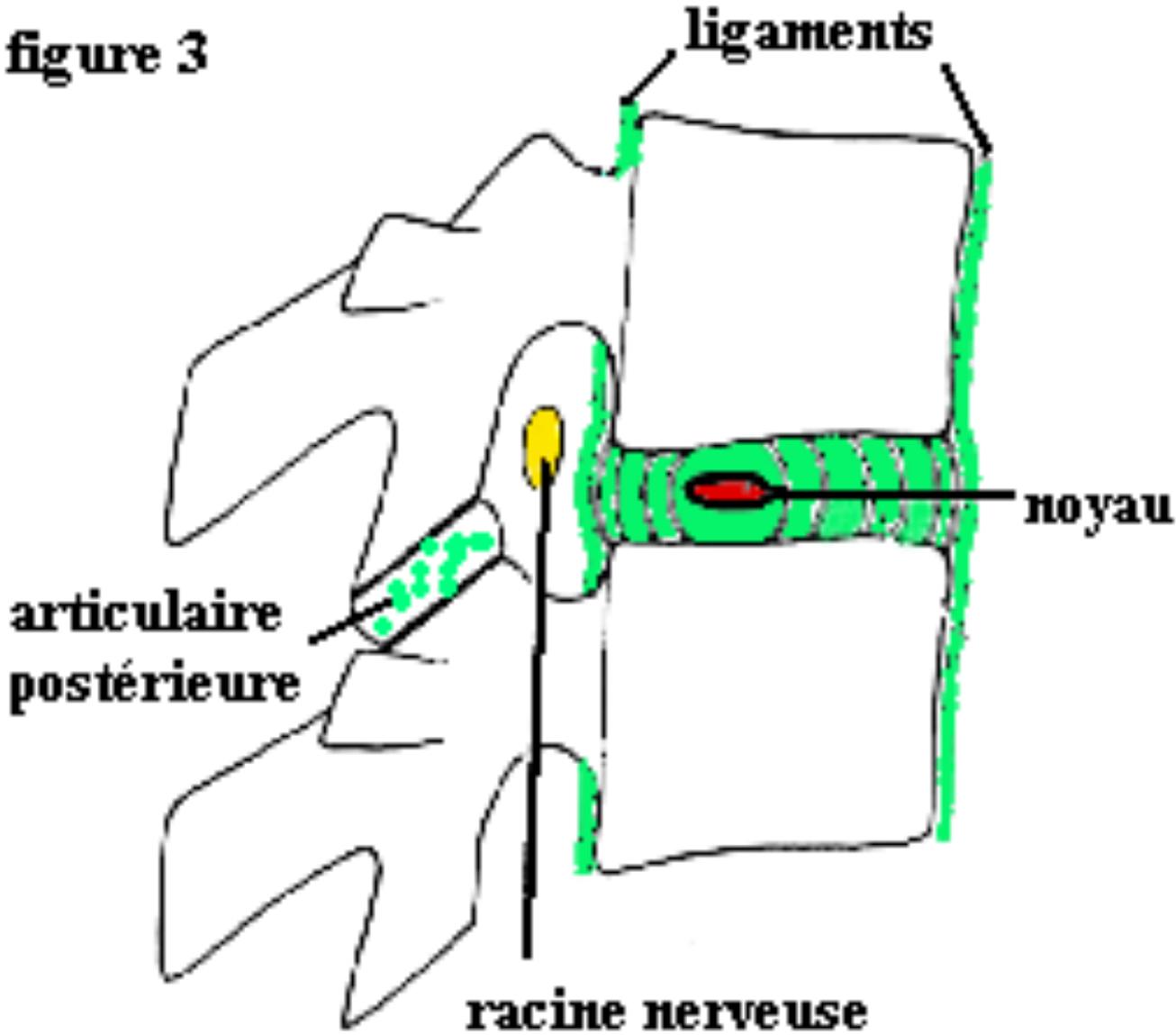


figure 5

LCVP
LCVA

figure 3



Ligaments

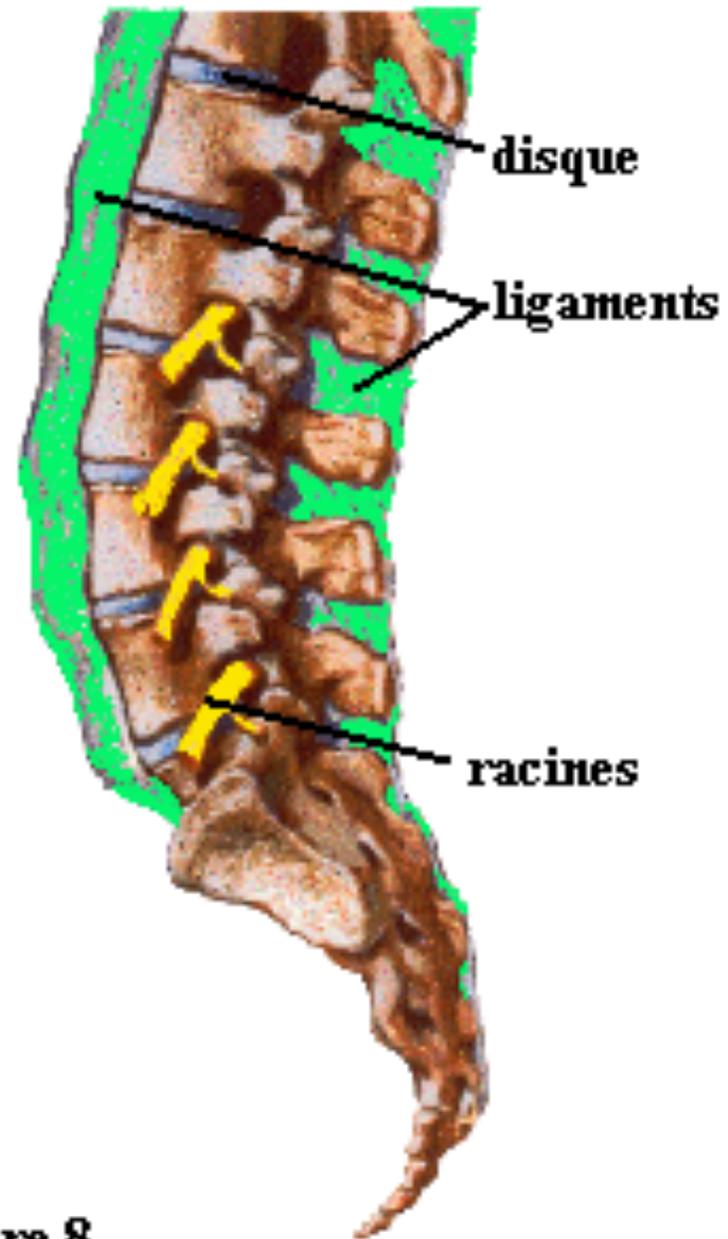


figure 8

Spinaux profonds

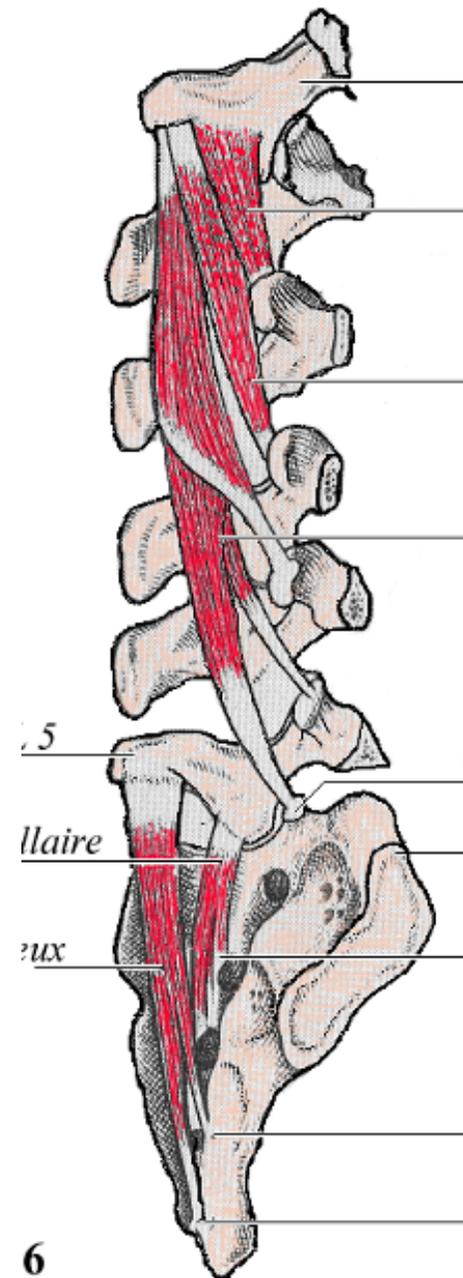
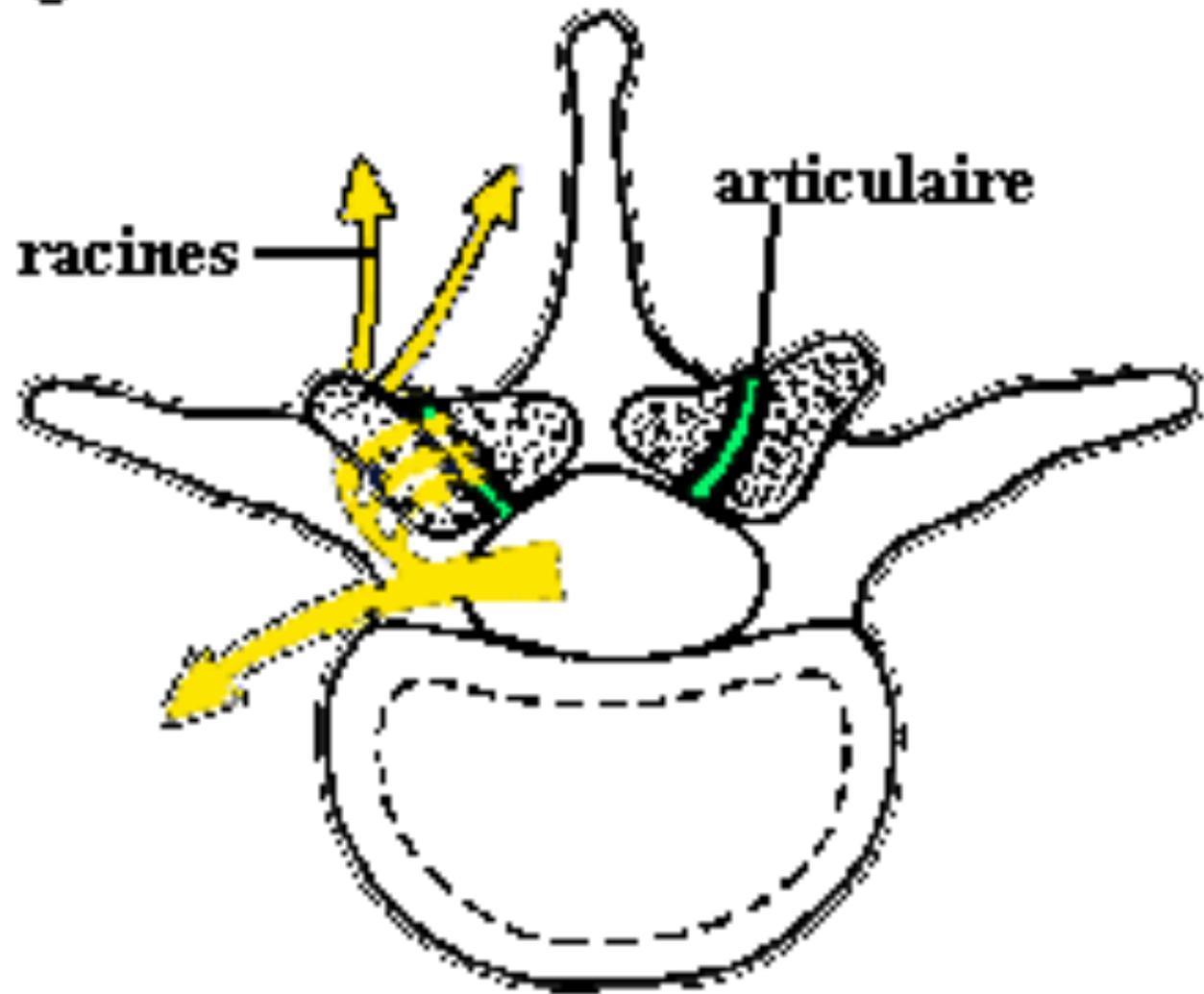
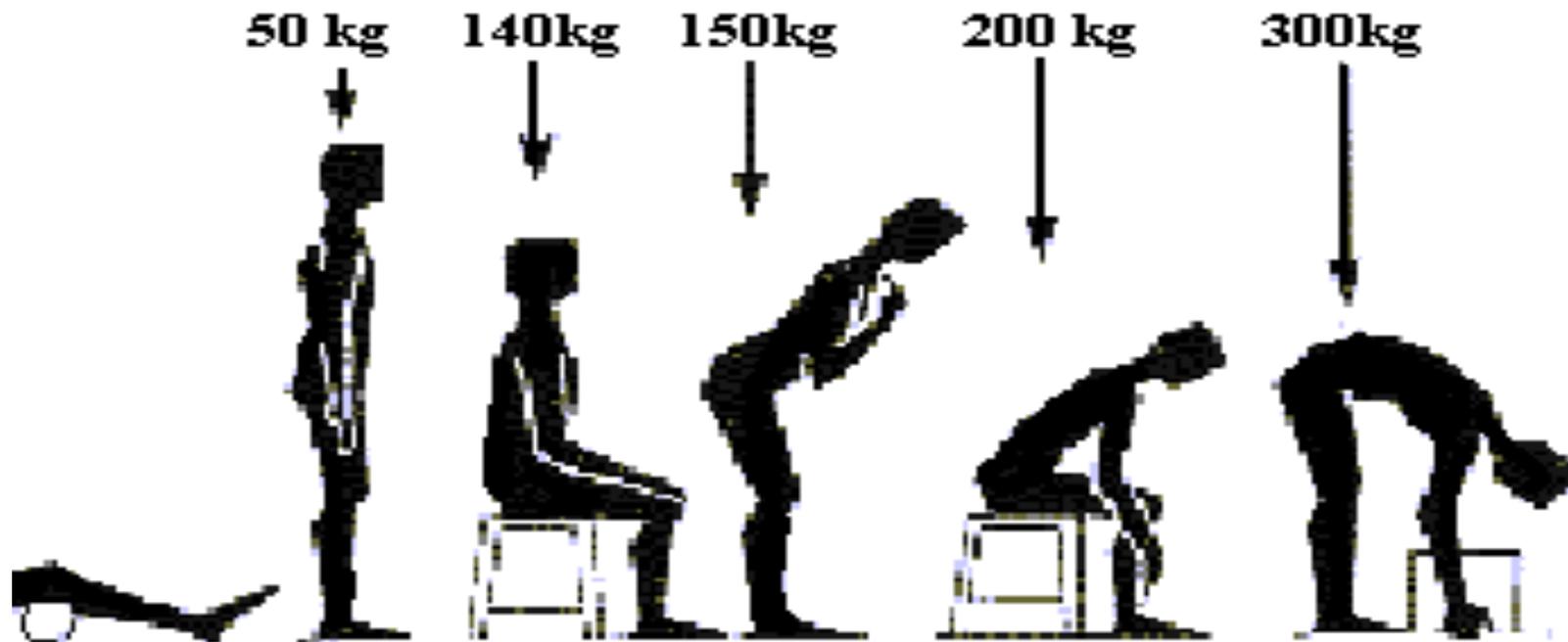


figure 7



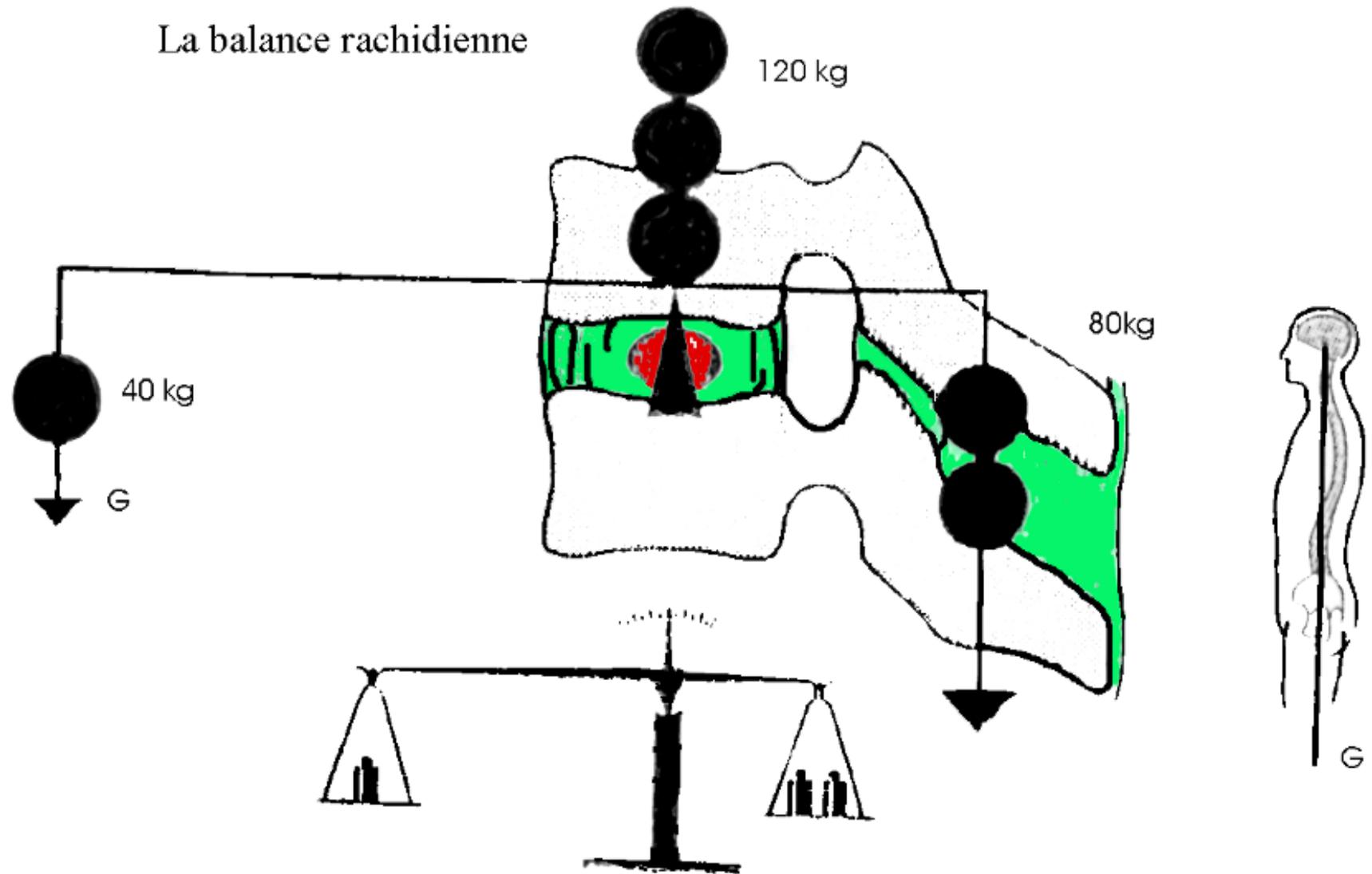
Racines
nerveuses

Contraintes L5/S1



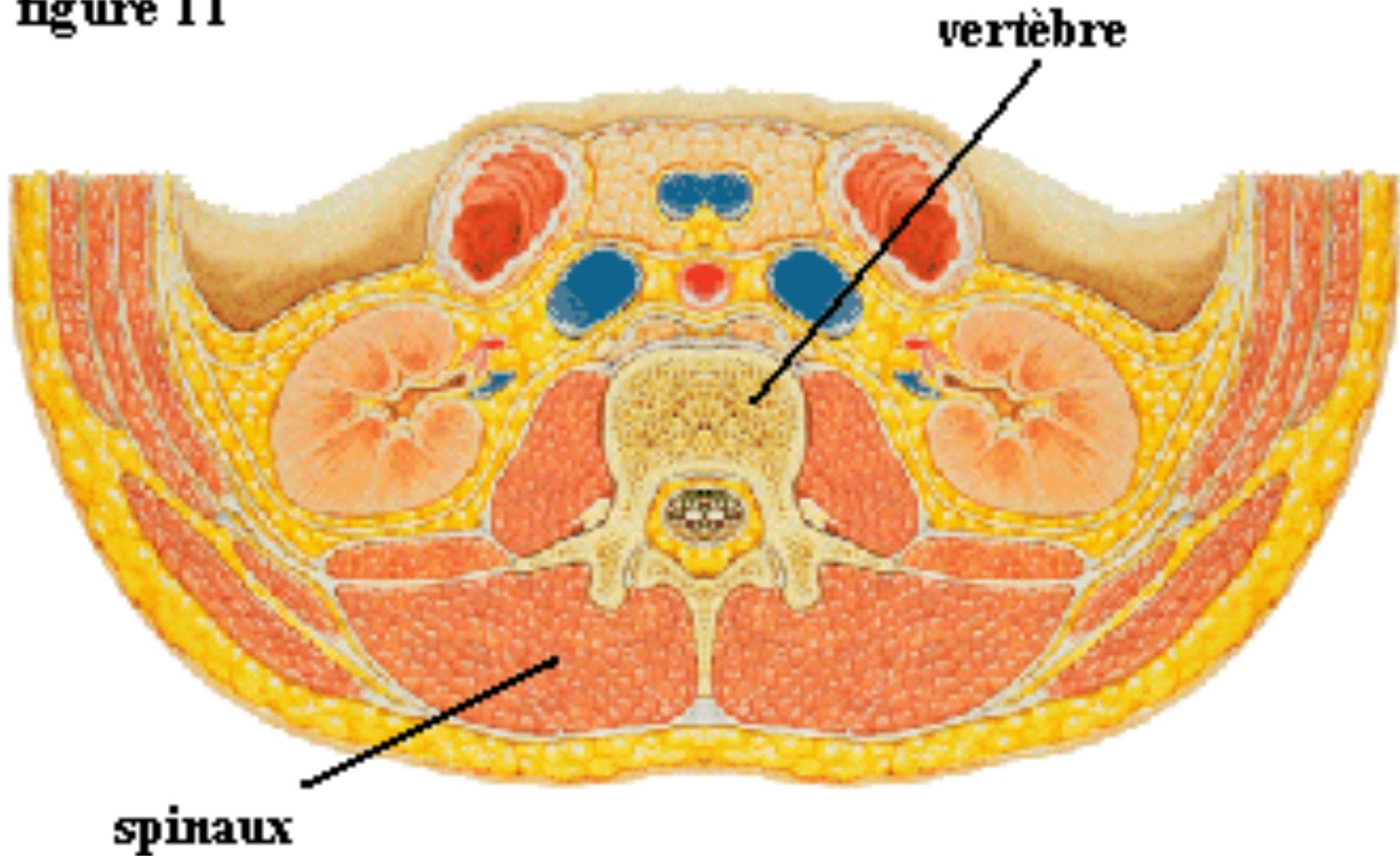
pression exercée sur le disque intervertébral

Balance rachidienne



Poutre composite

figure 11



Corset musculaire

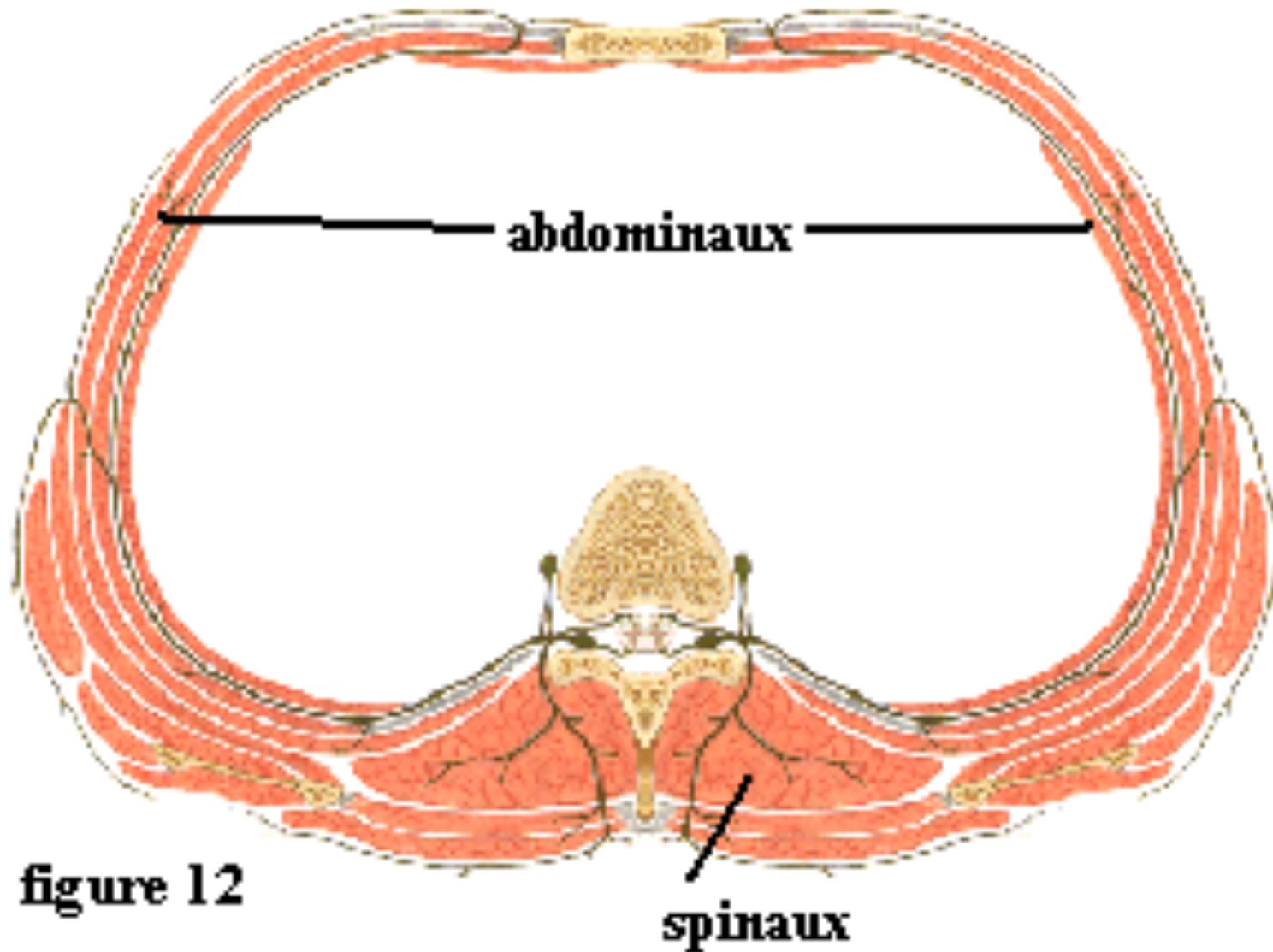


figure 12

Evaluation musculaire

Pic du couple en N/m 30°/s	Abdominaux	Spinaux	Ratio A/S
Sujet sain	307	369	0,8
Lombalgie chronique	287	201	1,4

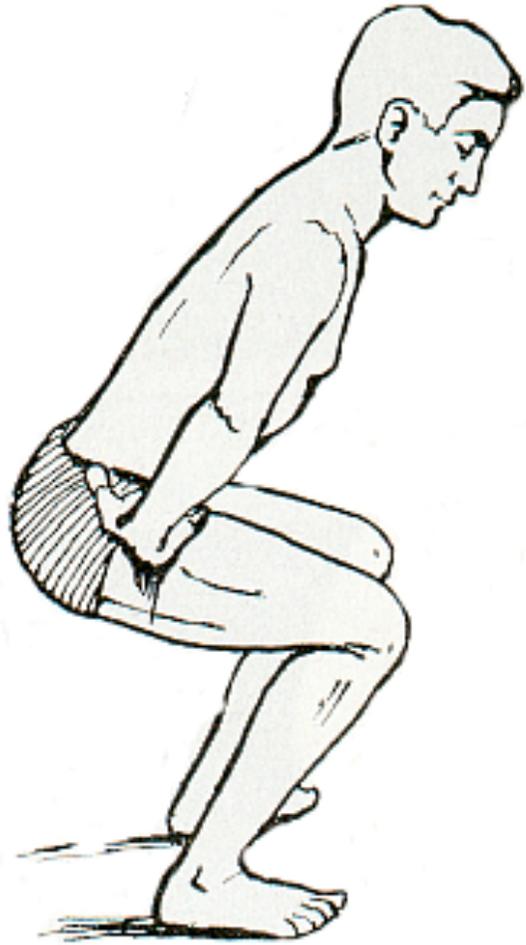
Facteurs de risques

- Vitesse
 - Charge
 - Amplitude extrême
-
- $E_c = 1/2mv^2$
 - $E_p = mgh$

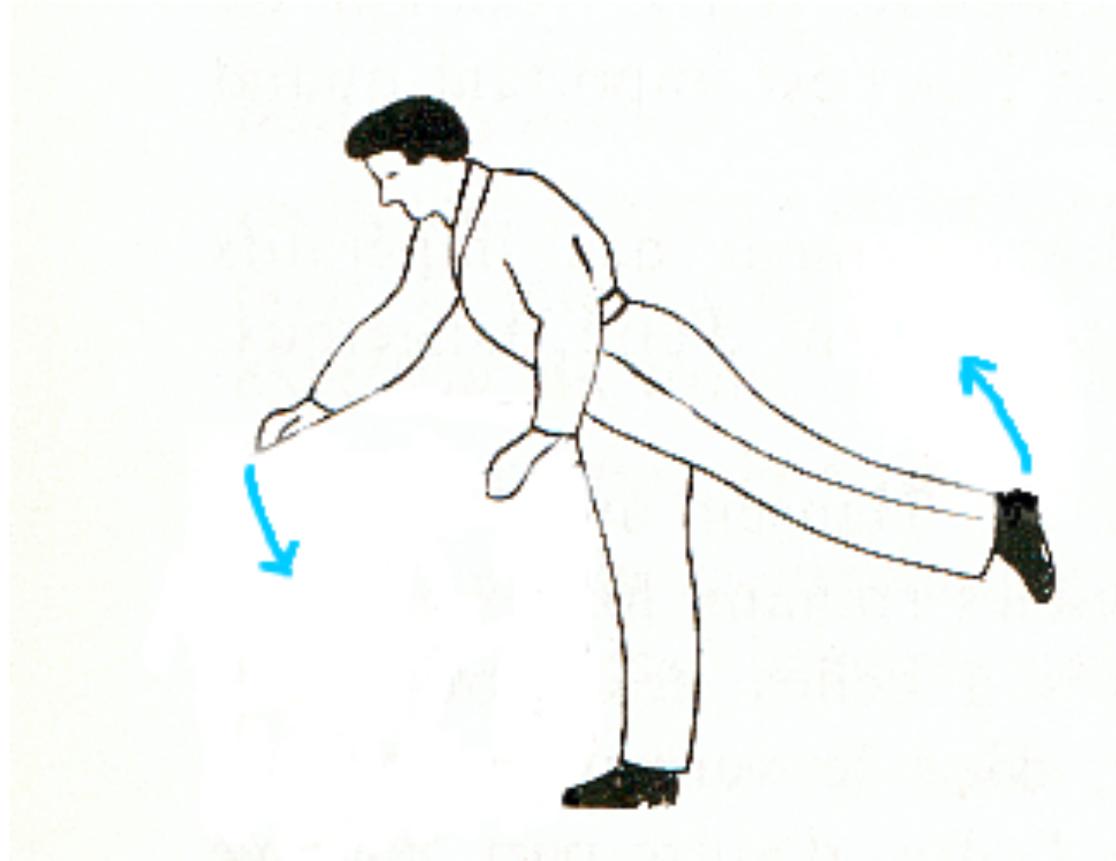
Verrouillage lombaire

- Olivier Troisier, Hôpital Foch
- Immobilisation parfaite et volontaire des lombaires
- En statique ou en dynamique
- Position intermédiaire
- Co-contraction abdominaux spinaux
- Utilisation des membres inférieurs
- **Mobilité sous-jacente**

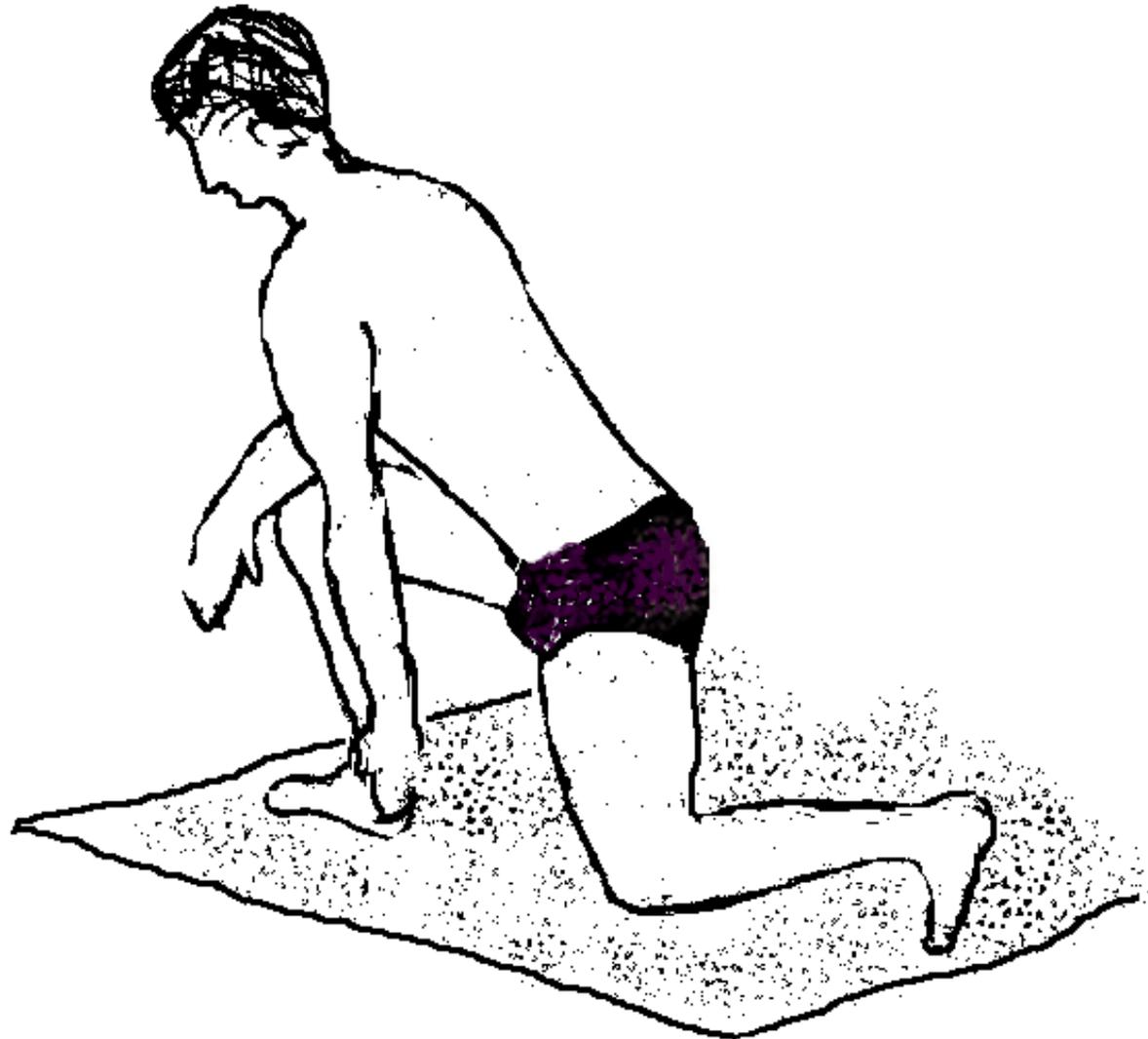
Accroupi



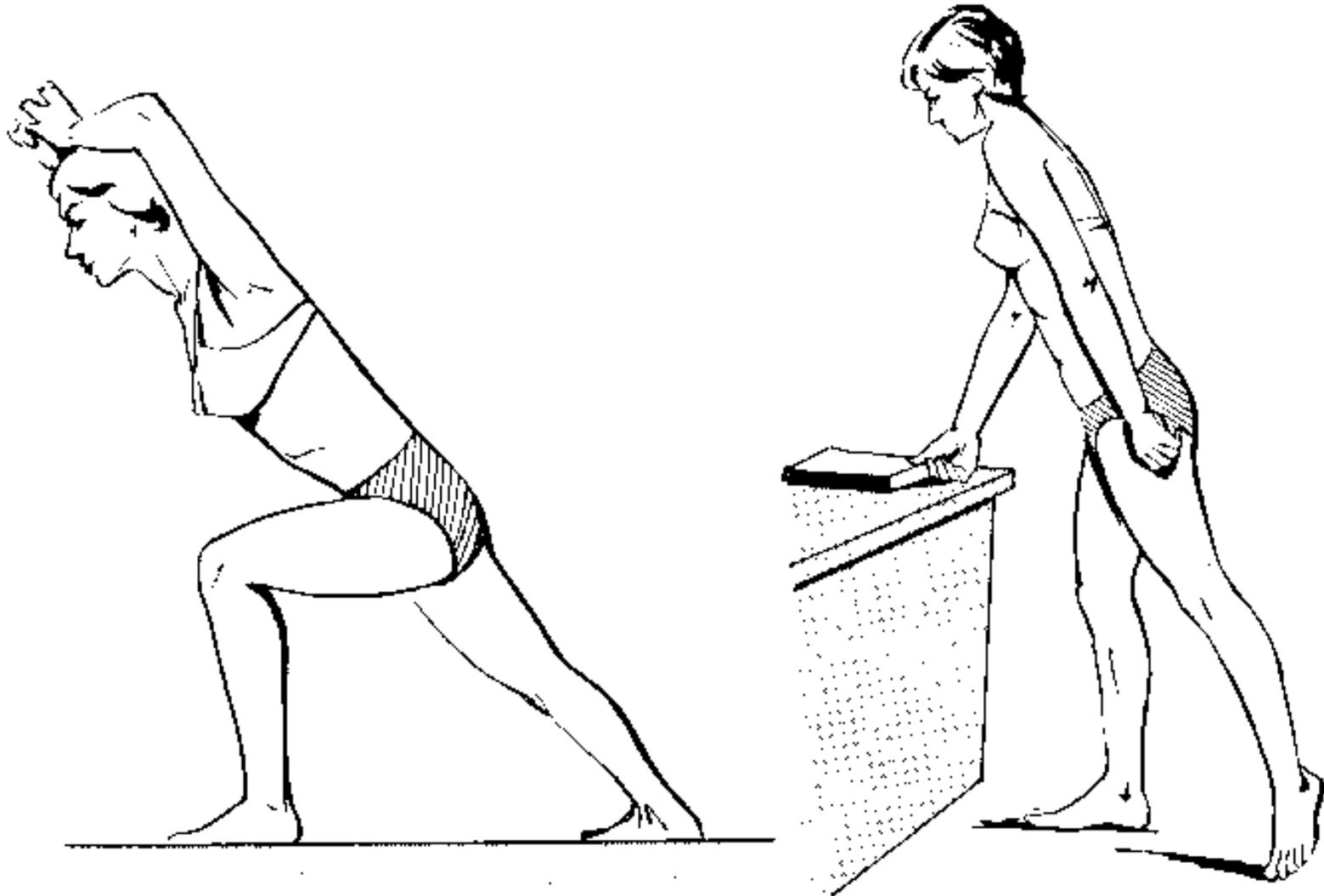
Balancier



Chevalier servant



Fente avant



Fentes arrière et latérale

