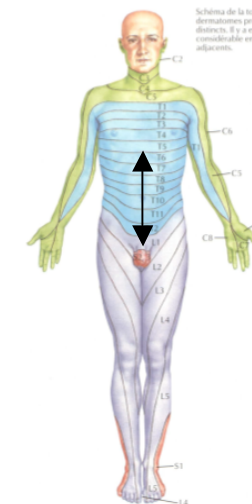
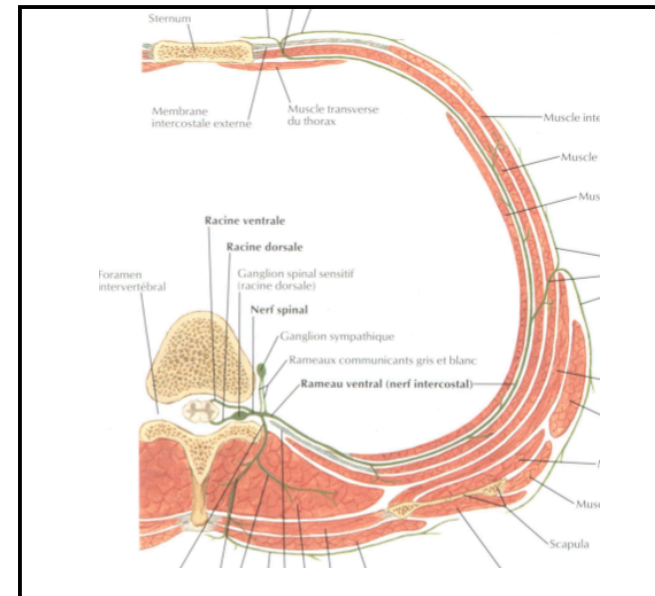
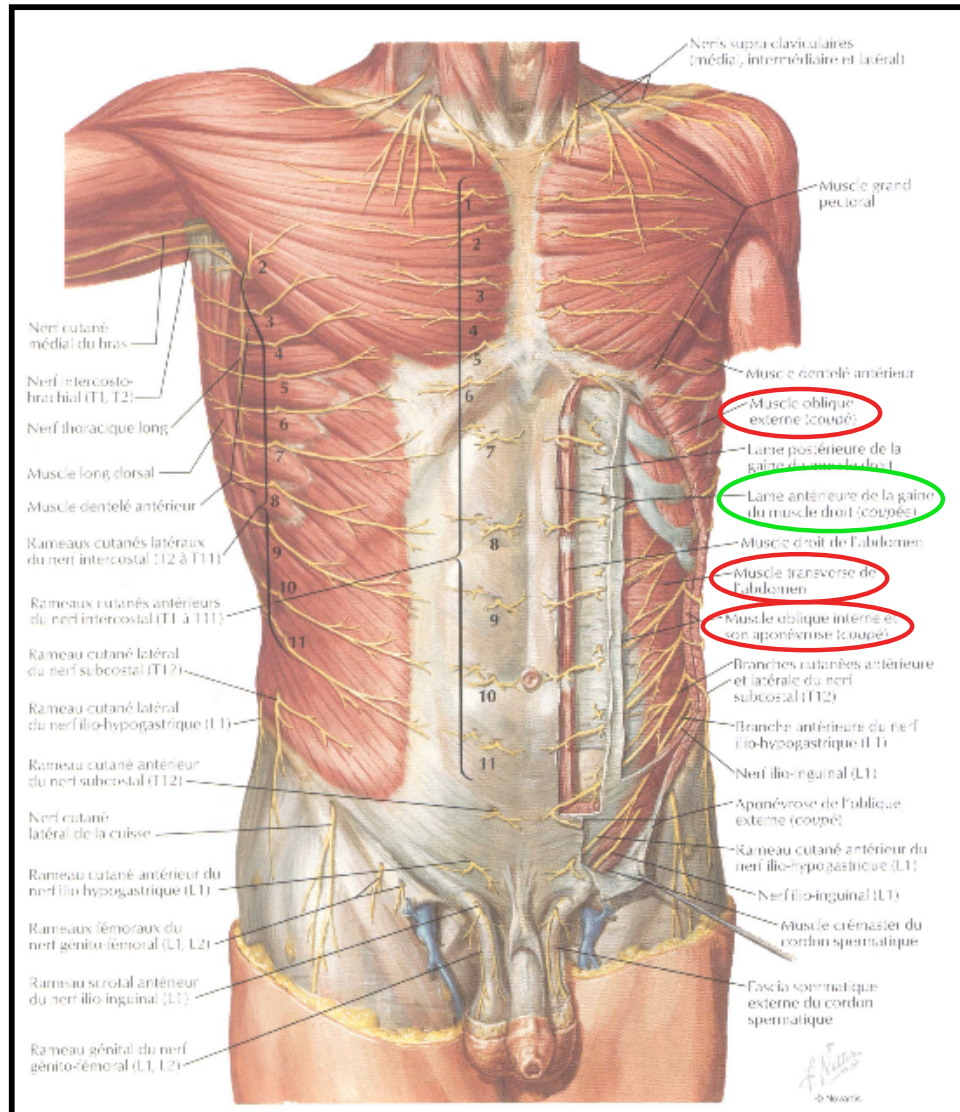


Le Présent et L'Avenir

TAP Bloc: Transversus abdominis plane



Le Présent et L'Avenir

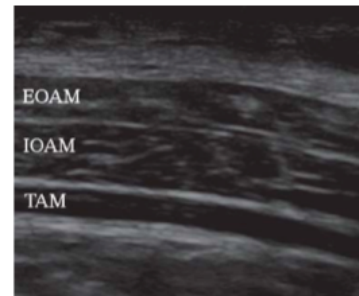
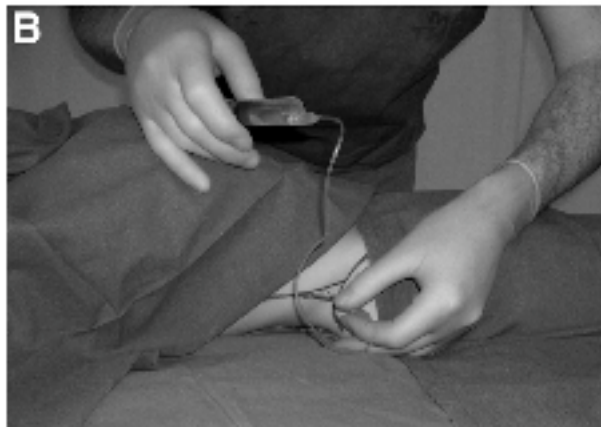
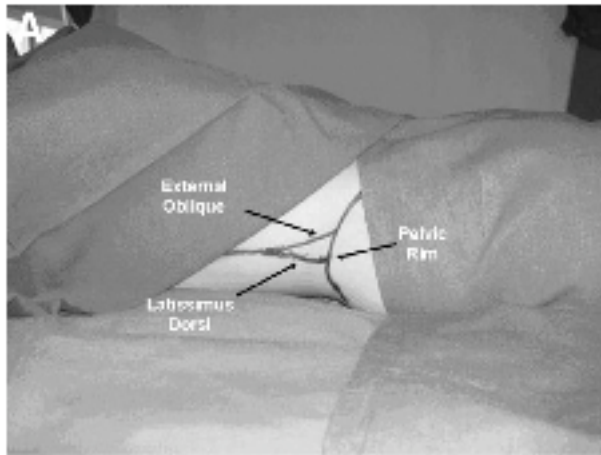
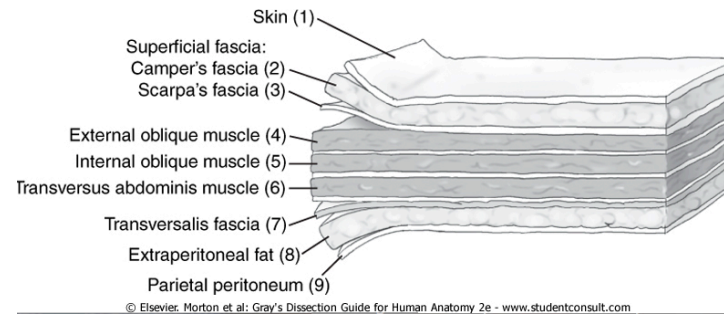


Fig 1 Transverse ultrasound view of the EOAM, IOAM, and TAM.

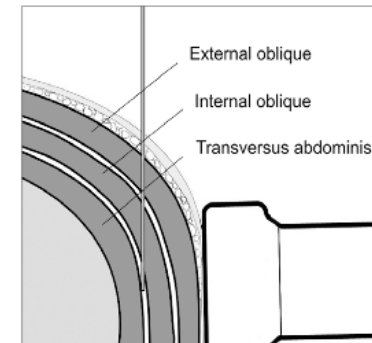
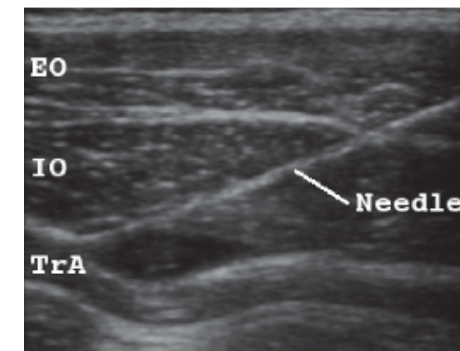


Fig 2 In-plane needle guidance technique for the TAP block.



Le Présent et L'Avenir

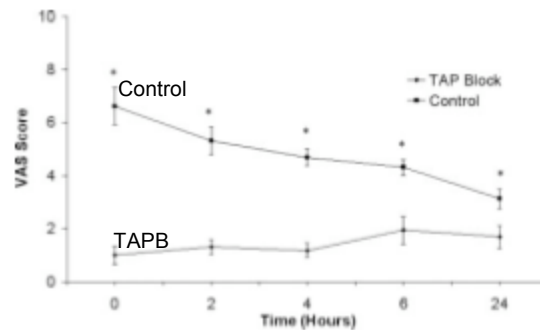


Figure 3. Mean postoperative verbal analog scale (VAS) pain scores at rest in each group over the first 24 postoperative hours. *Indicates significantly ($P < 0.05$, t -test after ANOVA) higher VAS score when compared with the transversus abdominis plane (TAP) block group.

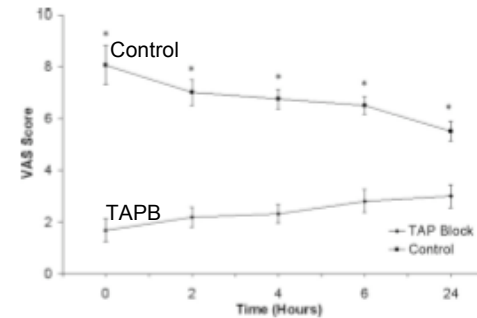


Figure 4. Mean postoperative verbal analog scale (VAS) pain scores on movement in each group over the first 24 postoperative hours. *Indicates significantly ($P < 0.05$, t -test after ANOVA) higher VAS score when compared with the transversus abdominis plane (TAP) block group.

Table 2. Postoperative Pain Scores and Analgesic Requirement

	Control (n = 16)	TAP block (n = 16)
Time to first request for morphine (min)	24.1 ± 6.9	157.2 ± 27.9†
Mean 24 h morphine requirement (mg)	80.44 ± 4.8	21.94 ± 2.2†
Categorical pain severity		
PACU	2.5 (2, 3)	0 (0, 1)‡
2 Hours	2 (2, 2)	0 (0, 1)‡
4 h	2 (1.5, 2)	0 (0, 1)‡
6 h	2 (1, 2)	1 (0, 1)‡
24 h	1 (1, 2)	1 (0, 1)

Ordinal data are presented as medians and interquartile ranges (given in parentheses), and continuous variables are presented as mean ± SEM.

TAP = transversus abdominis plane; PACU = postoperative anesthesia care unit.

† $P \leq 0.01$; and ‡ $P \leq 0.001$ when controlled with control.

Pourquoi l'ALR?



Figure 3 - Shows that the Set of Pillows forms a Trapezoidal Figure



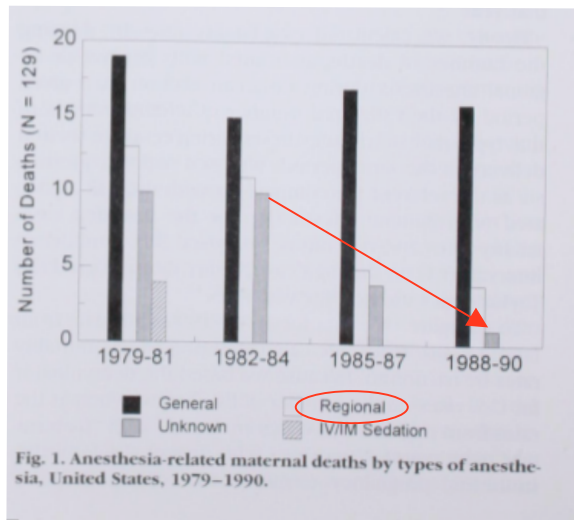
Pourquoi l'ALR?

■ CLINICAL INVESTIGATIONS

Anesthesiology
1997; 86:277-84
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Lippincott-Raven Publishers

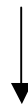
Anesthesia-related Deaths during Obstetric Delivery in the United States, 1979-1990

Joy L. Hawkins, M.D.,* Lisa M. Koonin, M.N., M.P.H.,† Susan K. Palmer, M.D.,‡ Charles P. Gibbs, M.D.§



Mortalité due à l'anesthésie

4.3/millions naissances



1.7/millions naissances

1970-1990

Table 1. Selected Characteristics of Women Dying of Anesthesia-Related Causes During Obstetric Delivery: United States, 1979-1990

Characteristic	N	%
Total	129	100
Age (yr)		
<20	16	12
20-24	41	32
25-29	36	28
30-34	25	19
35-39	6	5
40+	5	4
Race		
White	58	45
Black	67	52
Other	4	3
Education		
<12 yr	14	11
12 yr	46	36
>12 yr	30	23
Unknown	39	30
Trimester prenatal care began		
No care	3	2
First	74	57
Second	14	11
Third	8	6
Unknown	30	23
Delivery procedure		
Cesarean section	106	82
Vaginal delivery	6	5
Unknown	17	13

Table 3. Numbers, Case Fatality Rates, and Risk Ratios of Anesthesia-related Deaths during Cesarean Section Delivery by Type of Anesthesia: United States, 1979-1984 and 1985-1990

	Number of Deaths		Case Fatality Rate		Risk Ratio	
	1979-1984	1985-1990	1979-1984	1985-1990	1979-1984	1985-1990
General	33	32	20.0* (95% CI 17.7, 22.7)	32.3* (95% CI 25.9, 49.3)	2.3 (95% CI 1.9, 2.9)	16.7 (95% CI 12.9, 21.8)
Regional	19	9	8.6† (95% CI 1.8, 9.4)	1.9† (95% CI 1.8, 2.0)	Referent	Referent

CI = confidence interval.

* Per million general anesthetics for cesarean section.

† Per million regional anesthetics for cesarean section.

Pourquoi l'ALR?

Lutter contre la douleur per et post-opératoire:
OPIOIDES

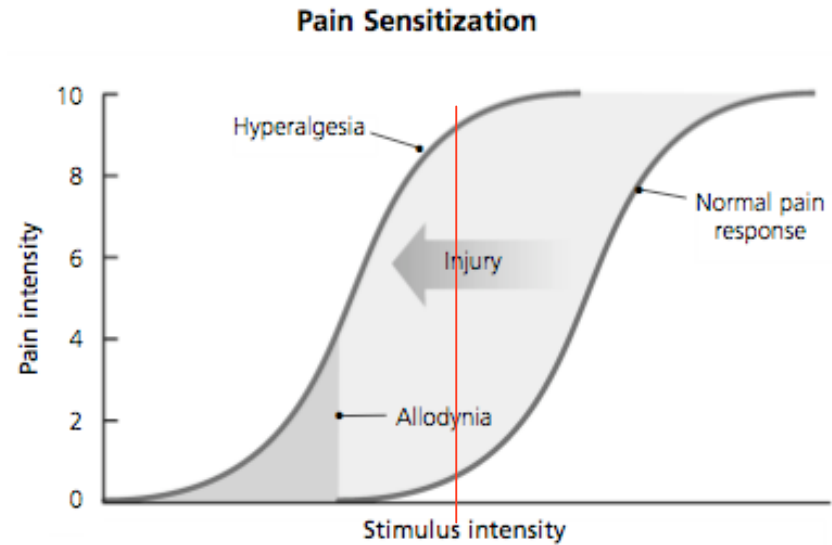
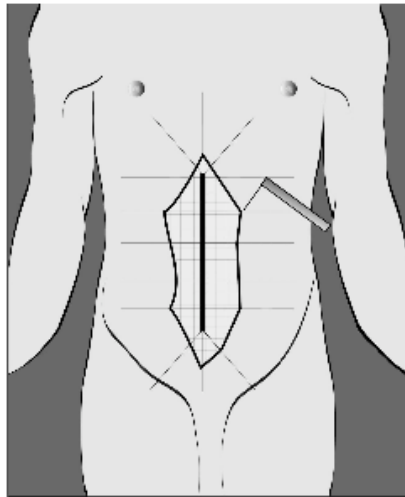
Nausées

Iléus

Globe

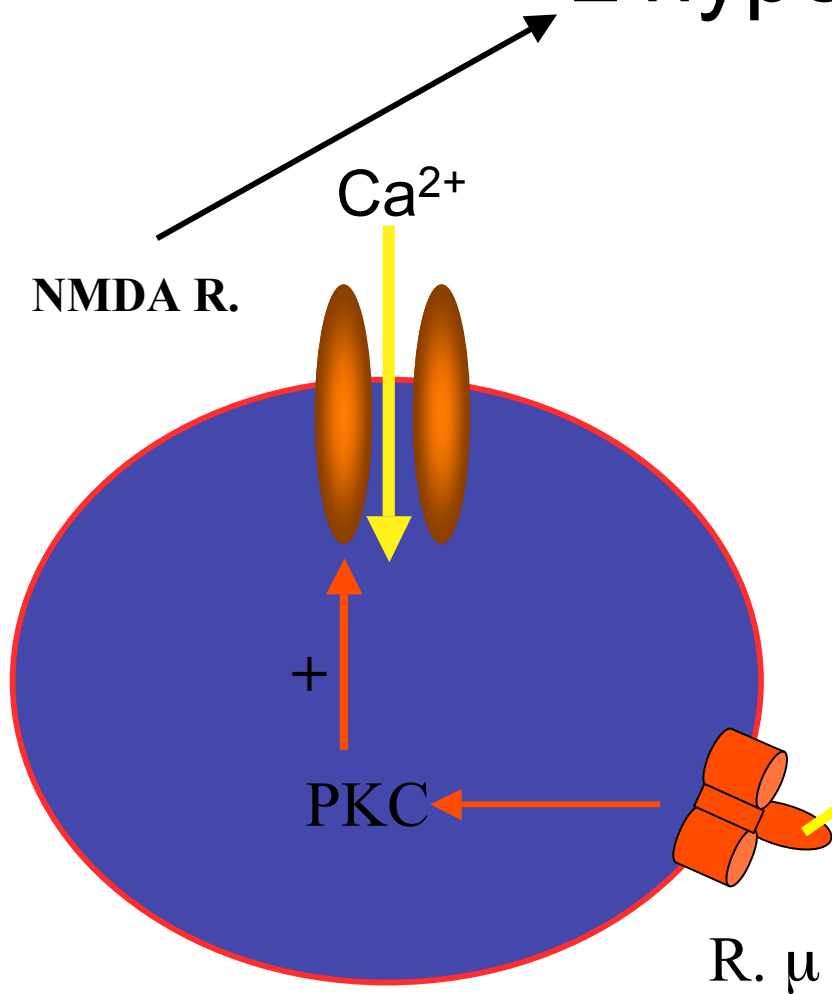
Hyperalgésie

Pourquoi l'ALR? L'hyperalgésie

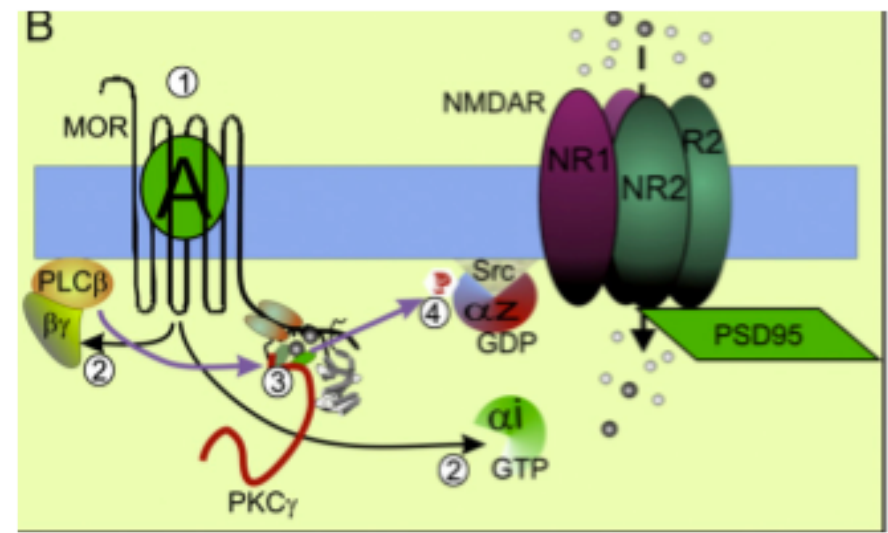


L'aire d'hyperalgésie est induite par la chirurgie
Modulée par les opioïdes

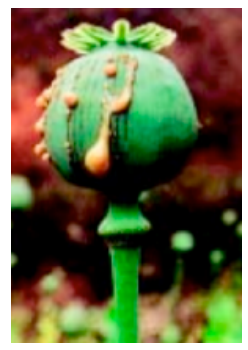
Pourquoi l'ALR? L'hyperalgésie



Chen and Huang Neuron 1991, 1992



Blasquez Cell signalling Sept 2009



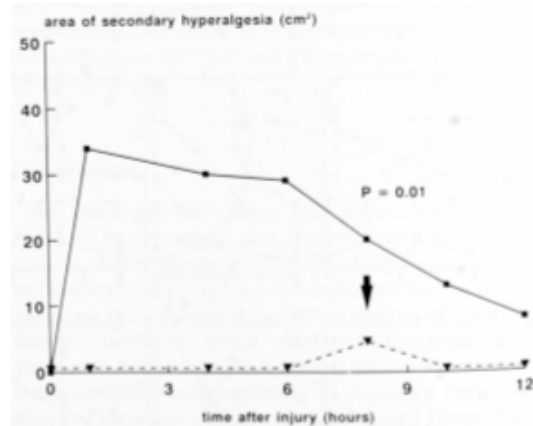
Pourquoi l'ALR? L'hyperalgésie

■ CLINICAL INVESTIGATIONS

Anesthesiology
1996; 84:1020-6
© 1996 American Society of Anesthesiologists, Inc.
Lippincott-Raven Publishers

Effect of Preemptive Nerve Block on Inflammation and Hyperalgesia after Human Thermal Injury

Juri L. Pedersen, M.D.,* Michael E. Crawford, M.D.,† Jørgen B. Dahl, M.D., Ph.D.,‡ Jannick Brennum, M.D.,§ Henrik Kehlet, M.D., Ph.D.*||



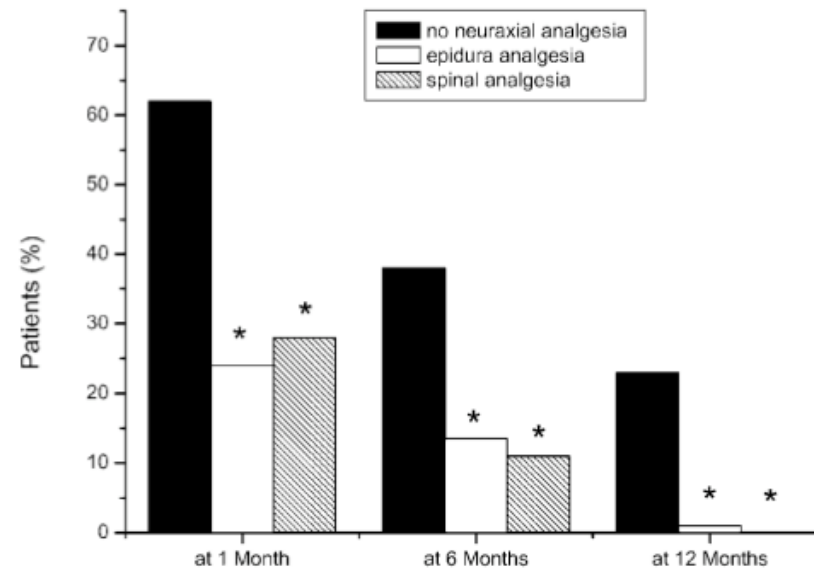
Effet du bloc du nerf saphène sur l'hyperalgésie

Pourquoi l'ALR? L'hyperalgésie

(Acta Anaesth. Belg., 2006, 57, 373-379)

The use of intraoperative epidural or spinal analgesia modulates postoperative hyperalgesia and reduces residual pain after major abdominal surgery

P. LAVAND'HOMME and M. DE KOCK



ALR et Risques

Anesthesiology 2002; 97:1274-80

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Major Complications of Regional Anesthesia in France

The SOS Regional Anesthesia Hotline Service

Yves Auroy, M.D.,* Dan Benhamou, M.D.,† Laurent Bagues, M.D.,* Claude Ecoffey, M.D.,‡ Bruno Falissard, M.D., Ph.D.,§
Frédéric Mercier, M.D., Ph.D.,|| Hervé Bouaziz, M.D., Ph.D.,# Kamran Samii, M.D.**

Table 3. Number and Incidence of Serious Events Related to Central (Neuraxial) Blocks (Excluding Obstetric Cases)

	Cardiac Arrest	Respiratory Failure	Seizures	Peripheral Neuropathy	Cauda Equina Syndrome	Central Neurologic Event	Meningitis	Death
Spinal (35,439 performed)	9 (2.5) (0.0-5.1)	2 (0.6) (0.0-2.0)	1 (0.3) (0.0-1.4)	9 (2.5) (0.0-5.1)	3 (0.8) (0.0-2.3)	0 (0.0-0.8)	1 (0.3) (0.0-1.4)	3 (0.8) (0.0-2.3)
Epidural (5,561 performed)	0 (0.0-0.5)	0 (0.0-0.5)	1 (1.8) (0.0-9.0)	0 (0.0-0.5)	0 (0.0-0.5)	0 (0.0-0.5)	1 (1.8) (0.0-9.0)	0 (0.0-0.5)

Values are expressed as n (n/10,000) (95% CI).

ALR et Risques

Anesthesiology 2002; 97:1274-80

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Major Complications of Regional Anesthesia in France

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Yves Auroy, M.D.,* Dan Benhamou, M.D.,† Laurent Bargues, M.D.,* Claude Ecoffey, M.D.,‡ Bruno Falissard, M.D., Ph.D.,§
Frédéric Mercier, M.D., Ph.D.,|| Hervé Bouaziz, M.D., Ph.D.,# Kamran Samii, M.D.**

Table 4. Number and Incidence of Serious Events Related to Upper Limb Blocks (Excluding Obstetric Cases)

	Cardiac Arrest	Respiratory Failure	Seizures	Peripheral Neuropathy	Death
Interscalene block (3,459 performed)	0 (0.0-8.7)	0 (0.0-8.7)	0 (0.0-8.7)	1 (2.9) (0.0-14.5)	0 (0.0-8.7)
Supraclavicular block (1,899 performed)	0 (0.0-15.9)	0 (0.0-15.9)	1 (3.3) (0.0-26.3)	0 (0.0-15.9)	0 (0.0-15.9)
Axillary plexus block (11,024 performed)	0 (0.0-2.7)	0 (0.0-2.7)	1 (0.9) (0.0-4.5)	2 (1.8) (0.0-6.3)	0 (0.0-2.7)
Midhumeral block (7,402 performed)	0 (0.0-4.1)	0 (0.0-4.1)	1 (1.4) (0.0-6.8)	1 (1.4) (0.0-6.8)	0 (0.0-4.1)

Values are expressed as n (n/10,000) (95% CI).

ALR et Risques

Anesthesiology 2002; 97:1274-80

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Frédéric Mercier, M.D., Ph.D.,|| Hervé Bouaziz, M.D., Ph.D.,# Kamran Samii, M.D.**

Table 5. Number and Incidence of Serious Events Related to Lower Limb Blocks (Excluding Obstetric Cases)

	Cardiac Arrest	Respiratory Failure	Seizures	Peripheral Neuropathy	Death
Posterior lumbar plexus block (394 performed)	1 (25.4) (0.0-126.9)	2 (50.8) (0.0-177.7)	1 (25.4) (0.0-126.9)	0 (0.0-76.1)	1 (25.4) (0.0-126.9)
Femoral block (10,309 performed)	0 (0.0-2.9)	0 (0.0-2.9)	0 (0.0-2.9)	3 (2.9) (0.0-7.8)	0 (0.0-2.9)
Sciatic nerve block (8,507 performed)	0 (0.0-3.5)	0 (0.0-3.5)	2 (2.4) (0.0-8.2)	2 (2.4) (0.0-8.2)	0 (0.0-3.5)
Popliteal sciatic nerve block (952 performed)	0 (0.0-31.5)	0 (0.0-31.5)	0 (0.0-31.5)	3 (31.5) (0.0-84.0)	0 (0.0-31.5)

Values are expressed as n (n/10,000) (95% CI).

CONCLUSION

En France le nombre de procédures ALR a été multiplié par **12** entre 1980 et 1996

Depuis une dizaine d'année
ECHOGRAPHIE

Travail d'équipe : chaque intervenant doit comprendre la technique

Technique nécessitant l'accord et l'information
du **patient et du chirurgien**

Les mesures de **sécurité** sont les mêmes que pour une
AG

Etape suivante

- Malade seul en salle après ALR (BARA)
 - IADE
 - **personnel infirmier spécialisé ALR
(PISAR)**