

Luxations: réduction dans le terrain

Dr Dominique SAVARY – SAMU 74



GEMNI septembre 2012



« Les réductions doivent se faire en urgence toujours après une radiographie au moins de face.

La réduction sur le terrain doit être exceptionnelle, dans des conditions objectives d'un bénéfice pour le patient:

- Milieu hostile
- Treuillage pour évacuation hélicoptérée
- Eloignement d'une structure permettent la radiographie... »

ACTUALITÉS
EN
MÉDECINE D'URGENCE

L'IMAGERIE
ET
L'URGENCE



Journées Scientifiques de la
Société Française
de Médecine d'Urgence

2011
SFEM éditions

Le milieu hostile

- Liées à l'isolement
- Liées au milieu
- Liées à l'accessibilité
 - Appui patin
 - Treuillage



Dans les zones d'accès difficiles

124 patients who had to be rescued by skate support or winch on the rescue base of Annecy in 2010

	Dead NACA 7	Severe NACA 4-6 ISS >16	Moderate NACA 1-3 ISS <16	Fit & Well NACA 0
Population rescued	8.5%	17%	68.5%	6%

National Advisory Committee of Aeronautics Index

Dans les zones d'accès difficiles

n=124	Inaccessible locations
Intravenous line	98
Major Analgesics	79
Reduction of fracture / luxation	26
Pelvic belt / KED	60
IV fluid administration >1500 ml	26
Vasoactive drug	13
intubation	18

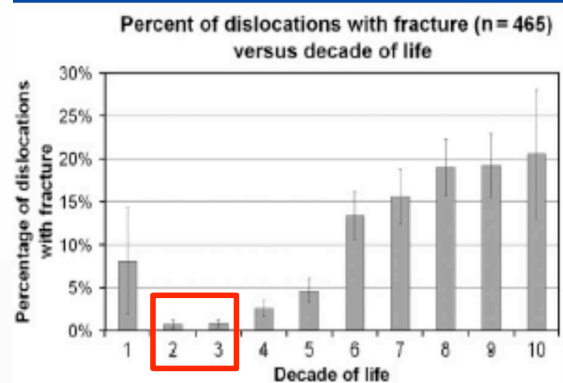
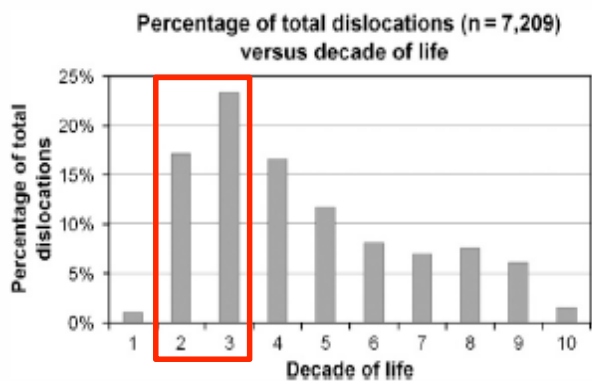
NACA location index

H	Extreme rescue operation	0
G	Difficult winch operation, climbing necessary	4%
F	Landing impossible, Winch operation	36%
E	Uneasy by foot, landing possible	60%
D	Impossible by car, accessible by foot	
C	Accessible by car	
B	Easy access by ambulance	
A	Hospital	

Helicopter emergency medical service in difficult rescue situations. Savary D

Do all patients with shoulder dislocations need prereduction x-rays? ☆

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Paul C. Allegra MD^c, John R. Allegra MD, PhD^{a,b}



American Journal of Emergency Medicine 2011;29:609-612.

Prereduction Radiographs in Clinically Evident Anterior Shoulder Dislocation

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 RIYAD B. ABU-LABAN, MD, FRCPC,*†
 JEFF BOYD, MBBS, CCFP(EM)*

TABLE 3. Comparison of Treatment Delay Between Facilities and With and Without Premedication

	Hospital (minutes)	Ski Hill (minutes)	P
Time to commencing reduction			
Mean ± SD	38.21 ± 15.62	12.00 ± 14.52	<0.0001
Median	37.00	5.00	n/a
Delay to reduction attributable to prereduction radiograph			
Mean ± SD	29.6 ± 13.05	n/a	n/a
Median	29.5		
Time in treatment facility			
All patients—Mean ± SD	99.8 ± 41.1	40.4 ± 21.7	<0.0001
reduced with premedication			
Mean ± SD	119.5 ± 31.8* (n = 33)	50 ± 18.4** (n = 17)	<0.0001
reduced without premedication			
Mean ± SD	59.1 ± 25.3* (n = 16)	32.5 ± 21.5** (n = 19)	<0.0024

NOTE: *P < 0.0001; **P < 0.0127.

American Journal of Emergency Medicine 1999;17:658-658.

Silver BE, et al. How Good Are Emergency Physicians in Predicting the Results of Shoulder X-Rays? Annals of Emerg Med 1999: S69

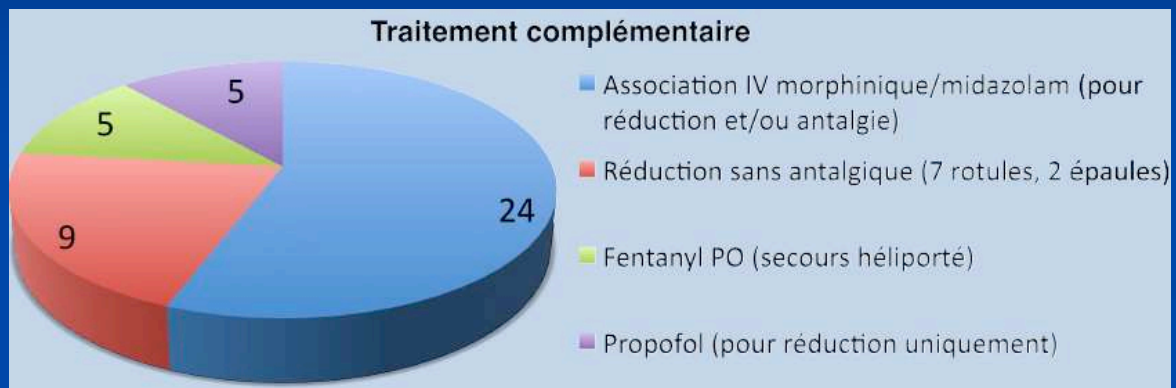
Etude observationnelle des luxations Antérieures gléno humérale réduites sans radiographies préalables en milieu hostile

	Secours en montagne	Service d'Urgence	p
Age	32	41	0,051
Sexe (M)	78	88,5	0,248
1 ^{er} épisode	68,8	80,5	0,231
EVA initiale	9 (4-10)	8 (3-10)	0,92
Délai	68 (20-260)	105 (15-300)	0,22

*B Vallet, D. Savary, B. Gelas-Dore, FX Ageron,
 O. Baptiste, F. Champly.
 Sallanches-Chamonix*



Prise en charge préhospitalière des luxations articulaires (épaule coude et rotule)



Mermillod-blondin R., Delgado D, faucher A, Schmit AL., Binauld G., Ageron FX., Savary D. Annecy



Anesthetic Methods for Reduction of Acute Shoulder Dislocations: A Prospective Randomized Study Comparing Intraarticular Lidocaine With Intravenous Analgesia and Sedation

JOSEPH KOSNIK, MD,* FALAH SHAMSA, PhD,*

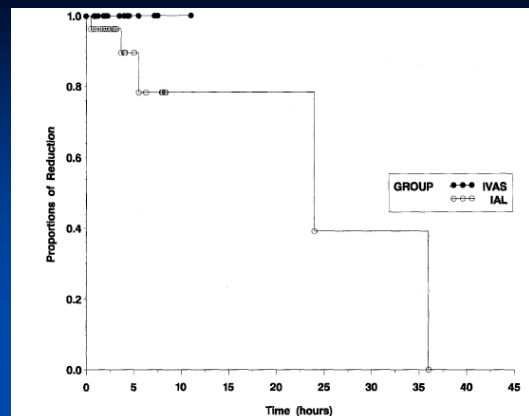


TABLE 2. Outcome Measures

Outcome Measure	IVAS	IAL	P
No. of patients	20	29	
Success rate	20/20	24/29	.07
Reduction ease (SD)	3.32 (2.36)	4.45 (2.46)	.12
Pain score (SD)	3.95 (2.39)	4.90 (2.34)	.18

ABBREVIATIONS: IVAS, intravenous analgesia/sedation; IAL, intraarticular lidocaine injection.

Fitch RW, Kuhn JE. Acad Emerg Med 2008

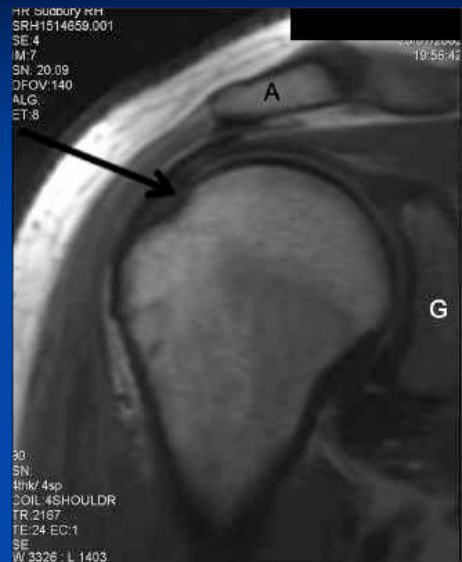
Pradhan RL et al JNMA J Nepal Med Assoc. 2006

Wakai A et al. Cochrane Database Syst Rev. 2011

American Journal of Emergency Medicine 1999;17:566-570.



Demonstration of approximate angle and location at which the needle enters the skin.

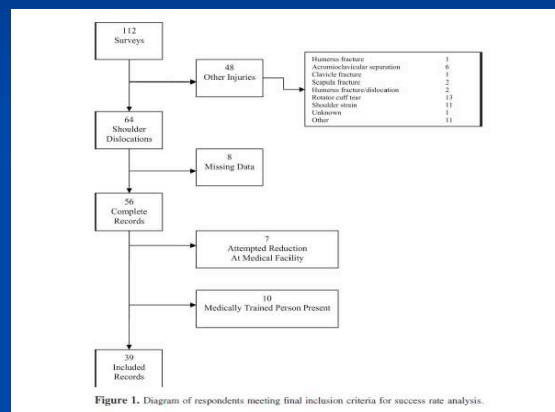


Coronal MRI image of a normal right shoulder.

A = acromion process. G = glenoid.
The arrow shows the direction of needle entry.

Safety and Efficacy of Attempts to Reduce Shoulder Dislocations by Non-medical Personnel in the Wilderness Setting

Jack Ditty, MD; Dugald Chisholm, MD; Stephen M. Davis, MPA, MSW; Mary Estelle-Schmidt



Anterior glenohumeral dislocations: Utilization of the Oxford Chair Technique of reduction by Emergency Nurse Practitioners

Stuart L.F. Smith, MSc, BSc, Dip HE, RN*

Luxation de hanche

- *La réduction doit être réalisée avant la sixième heure pour diminuer le risque de nécrose de la tête*

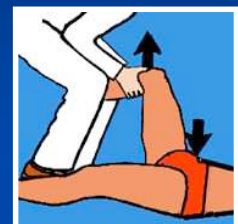
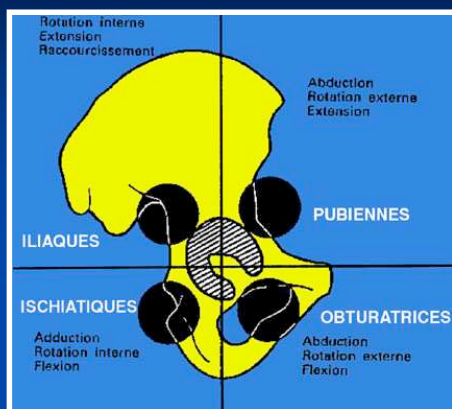


- *On recherche:*
 - *Rupture du LCP*
 - *Paralysie du nerf sciatique*
 - *Fracture de la rotule*



Shim SS. Clin Orthop 1979;140: 255-61

Luxation de hanche



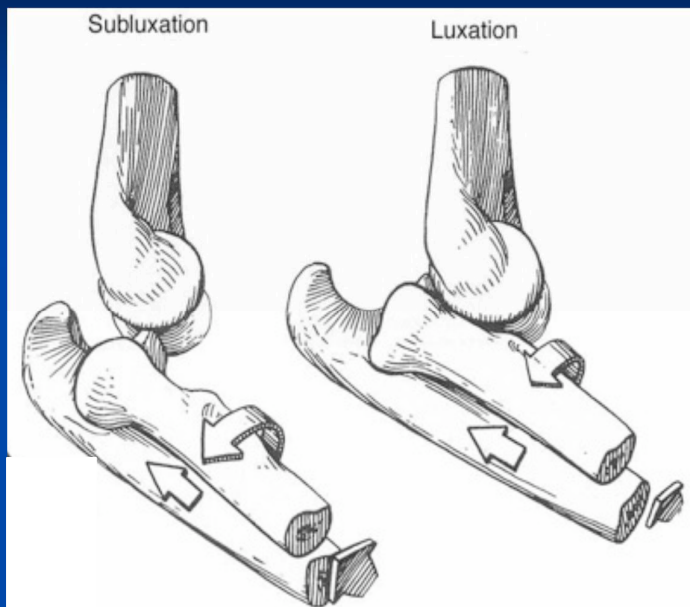
Brav EA. Traumatic dislocation of the hip: Army experience and results over a 12 year period. J Bone Joint Surg 1962; 44A:11-5.

Luxation de prothèse



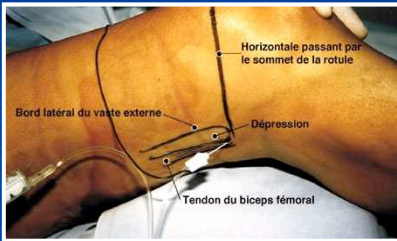
*Quelle sédation pourrait-on utiliser au SAU pour la réduction des luxations de prothèse de hanche (LPH) ; étude de 51 cas au SAU d'Avignon?
Dr D. Munoz – JEUR 2008;21; A16-A17*

Luxation du Coude



- Ne pas nuire
- Réduction douce

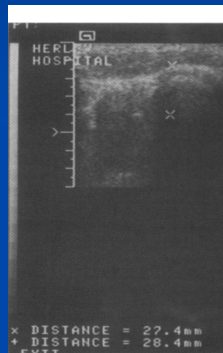
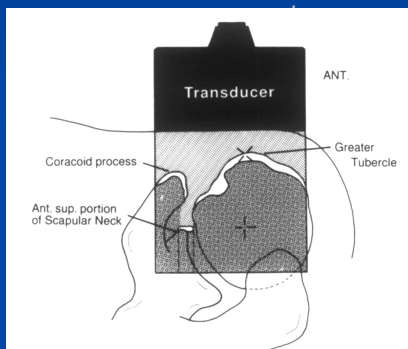
Intérêt de l'Anesthésie Loco Régionale



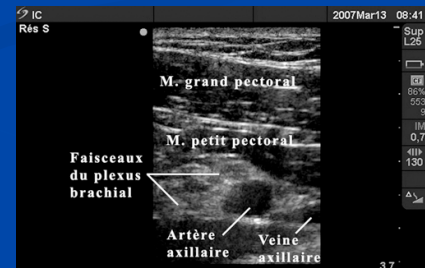
Intérêt de l'ALR lors des hélitreuilages. Gros T

Ultrasonic measurement of the anterior translation in the shoulder joint

Annabel Lee Krarup, MD, Michel Court-Payen, MD, Børn Skjoldbye, MD, and Gunnar S. Lausten, MD, Herlev, Denmark



J Shoulder Elbow Surg
March/April 1999



Apport de l'imagerie pour l'anesthésie locorégionale
L. Delaunay SFAR 2007