réanimation 2023
PARIS 14-16 JUIN
Palais des Congrès de Paris
Porte Maillot

Prise en charge du cérébrolésé

Quand peut débuter la prise en charge kinésithérapique ?

Adéla Foudhaïli
Kinésithérapeute
Hôpital Lariboisière, Paris

Adéla FOUDHAILI, Paris

☑ Je n'ai pas de lien d'intérêt potentiel à déclarer

Les axes de prise en charge kinésithérapique

Motrice

Respiratoire

Déglutition

La kinésithérapie motrice : quand peut-on débuter ?

Quand peut débuter la kinésithérapie motrice ?

La kinésithérapie motrice : quand peut-on débuter ?

Quand peut débuter la kinésithérapie motrice ?

Qu'est-ce qui nous limite ?

Sécurité

La kinésithérapie motrice : quand peut-on débuter ?

Les contre-indications absolues

Quand peut débuter la kinésithérapie motrice ? — Qu'est-ce qui nous limite ? — Sécurité

	Mobilisation au lit	Mobilisation hors du lit
Crises d'épilepsie non contrôlées		
Prise en charge active de l'HTIC avec PIC hors des objectifs		
Patient très agité ou combatif (RASS > 2)		

Hodgson et al., Critical Care, 2014

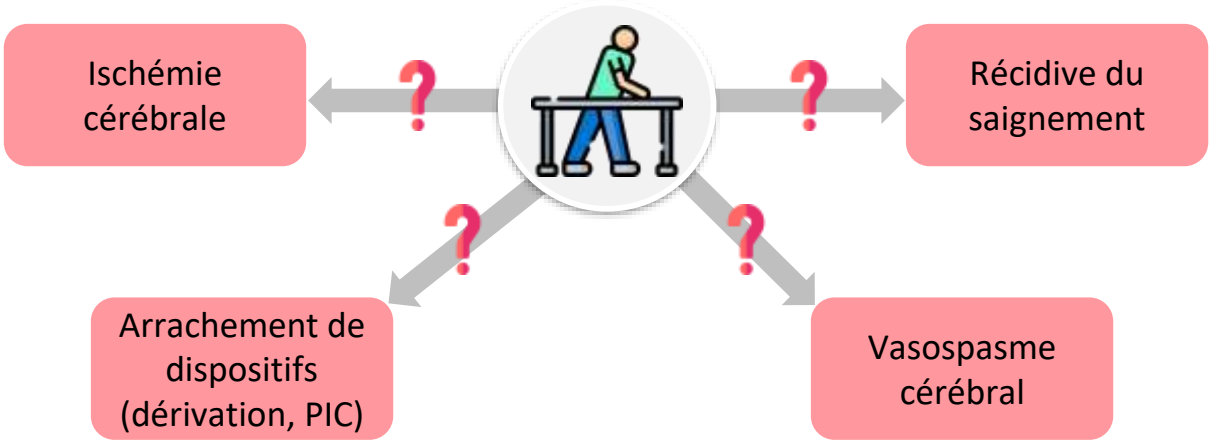
La kinésithérapie motrice : quand peut-on débuter ?

Les craintes

Quand peut débuter la kinésithérapie motrice ?

Qu'est-ce qui nous limite ?

Sécurité



La kinésithérapie motrice : quand peut-on débuter ?

Autres éléments à prendre en compte

Quand peut débuter la kinésithérapie motrice ?

Avec quels moyens ?

À quelle fréquence ?

À quelle intensité ?

AVC ischémique :

La littérature :
Alitement à plat strict versus 30°

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Cluster-Randomized, Crossover Trial of Head Positioning in Acute Stroke

C.S. Anderson, H. Arima, P. Lavados, L. Billot, M.L. Hackett, V.V. Olavarria, P. Muñoz Venturelli, A. Brunser, B. Peng, L. Cui, L. Song, K. Rogers, S. Middleton, J.Y. Lim, D. Forshaw, C.E. Lightbody, M. Woodward, O. Pontes-Neto, H.A. De Silva, R.-T. Lin, T.-H. Lee, J.D. Pandian, G.E. Mead, T. Robinson, and C. Watkins, for the HeadPoST Investigators and Coordinators*

- AVC ischémiques et hémorragiques
- 11093 patients randomisés
- À plat strict ou assis 30 degrés pendant les 1ères 24 heures
- Indépendance fonctionnelle à 3 mois : pas de différence significative
- Événements indésirables graves : pas de différence significative

La position à plat strict durant les 24 premières heures n'apporte pas de bénéfices.

Anderson et al., NEJM, 2017

La littérature :
Mobilisation passive au lit

Ischémie cérébrale ?

neurocritical care society Neurocrit Care (2013) 18:33–38
DOI 10.1007/s12028-012-9799-5

ORIGINAL ARTICLE

Effect of Early Physiotherapy on Intracranial Pressure and Cerebral Perfusion Pressure

Christian Roth · Hubertus Stitz · Anas Kalhout · Jens Kleffmann · Wolfgang Deinsberger · Andreas Ferbert

- HSA, TC, AVC
- Étude obs. avant/après, 84 patients
- Mobilisation passive (≈ >J4)
- Evolution PPC, PA rapportées à la PIC : pas de différence significative
- Événements indésirables : aucun

La mobilisation passive précoce (J4) n'est pas délétère.

Roth et al., Neurocrit Care, 2013

La littérature :
Mobilisation active au lit

Ischémie cérébrale ?

ORIGINAL WORK

Physiological Responses to In-Bed Cycle Ergometry Treatment in Intensive Care Unit Patients with External Ventricular Drainage

Elizabeth K. Zink[1,5*], Sowmya Kumble[2], Meghan Beier[2], Pravin George[3], Robert D. Stevens[4,5] and Mona N. Bahouth[5]

- (HSA, AVC) + DVE
- Étude obs. avant/après, 27 patients
- Cyclo-ergomètre (précoce)
- Evolution PIC, PA, PPC : pas de différence significative
- Événements indésirables : aucun

Le cyclo-ergomètre actif au lit n'est pas délétère.

Zink et al., Neurocrit Care, 2021

La littérature :
Mobilisation active hors-du-lit

Outcome After Mobilization Within 24 Hours of Acute Stroke

A Randomized Controlled Trial

Antje Sundseth, MD; Bente Thommessen, PhD; Ole Morten Rønning, PhD

- AVC ischémiques et hémorragiques
- Essai contrôlé randomisé, 56 patients
- Mobilisation hors du lit < H24
- Tendance (NS) : augmentation mortalité et dépendance

La mobilisation hors-du-lit <u>très</u> précoce n'est pas recommandée.

Zink et al., Neurocrit Care, 2021

La littérature :
Mobilisation hors-du-lit avec DVE

Arrachement dispositifs (dérivation, PIC)

Journal of Neuroscience Nursing

An Integrative Review: Early Mobilization of Patients With External Ventriculostomy Drains in the Neurological Intensive Care Unit

Megan T. Moyer, Janice L. Hinkle, James D. Mendez

- Revue systématique intégrative
- 12 études, 412 patients avec DVE
- Algorithme de mobilisation
- 1 délogement de DVE sur le total de sessions de mobilisation

La mobilisation hors-du-lit <u>protocolisée</u> avec DVE est sûre.

La littérature :
Mobilisation du patient avec HSA

Vasospasme cérébral ?

Effect of early mobilization and rehabilitation on complications in aneurysmal subarachnoid hemorrhage

Tanja Karic, MD,[1,2] Cecilie Røe, MD, PhD,[1,4] Tonje Haug Nordenmark, PhD,[1]
Frank Becker, MD, PhD,[3,4] Wilhelm Sorteberg, MD, PhD,[3] and Angelika Sorteberg, MD, PhD[3,4]

- Algorithme <u>progressif</u> de mobilisation

(3 premiers jours : élévation tête du lit)

- Moins de vasospasme symptomatique
- Pas d'augmentation des événements indésirables

CEREBROVASCULAR DYNAMICS WITH HEAD-OF-BED ELEVATION IN PATIENTS WITH MILD OR MODERATE VASOSPASM AFTER ANEURYSMAL SUBARACHNOID HEMORRHAGE

By Patricia A. Blissitt, RN, PhD, CCRN, CNRN, CCM, APRN, BC, Pamela H. Mitchell, RN, PhD, CNRN, David W. Newell, MD, Susan L. Woods, RN, PhD, and Basia Belza, RN, PhD. From the Neuroscience Intensive Care Unit, Duke University Medical Center, Durham, NC (PAB), Biobehavioral Nursing and Health Systems, University of Washington School of Nursing, Seattle, Wash (PHM, SLW, BB), and Seattle Neuroscience Institute at Swedish Medical Center, Seattle, Wash (DWN).

- Élévation tête du lit
- Patients avec vasospasme léger à modéré
- Pas d'aggravation du vasospasme
- Pas de détérioration neurologique

La mobilisation précoce <u>progressive</u> des patients HSA ne semble pas délétère.

La kinésithérapie motrice

Quand peut débuter la kinésithérapie motrice ?

Avec quels moyens ?

À quelle fréquence ?

À quelle intensité ?

Interaction entre les modalités

L'expérience d'AVERT

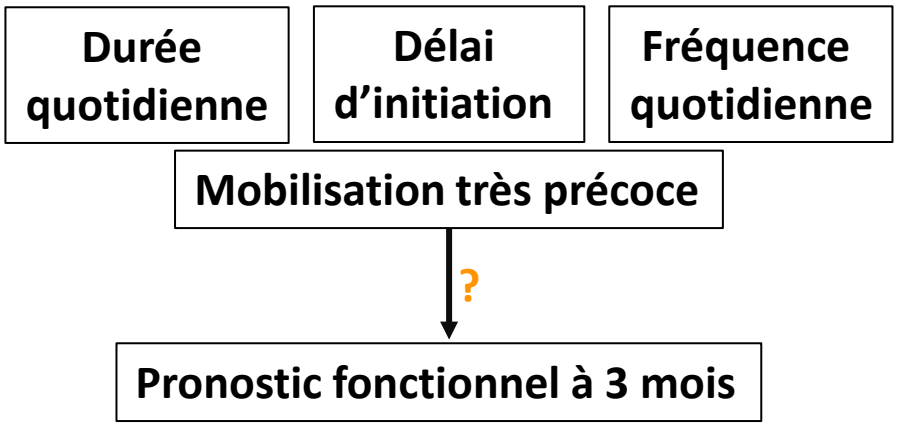
THE LANCET

Efficacy and safety of very early mobilisation within 24 h of stroke onset (AVERT): a randomised controlled trial

- ECR multicentrique
- 2104 patients avec AVC
- Mobilisation hors du lit très précoce (<H24)
- **Probabilité d'indépendance fonctionnelle à 3 mois réduite**

Langhorne et al., The Lancet, 2015

Prespecified dose-response analysis for A Very Early Rehabilitation Trial (AVERT)



Langhorne et al., The Lancet, 2015

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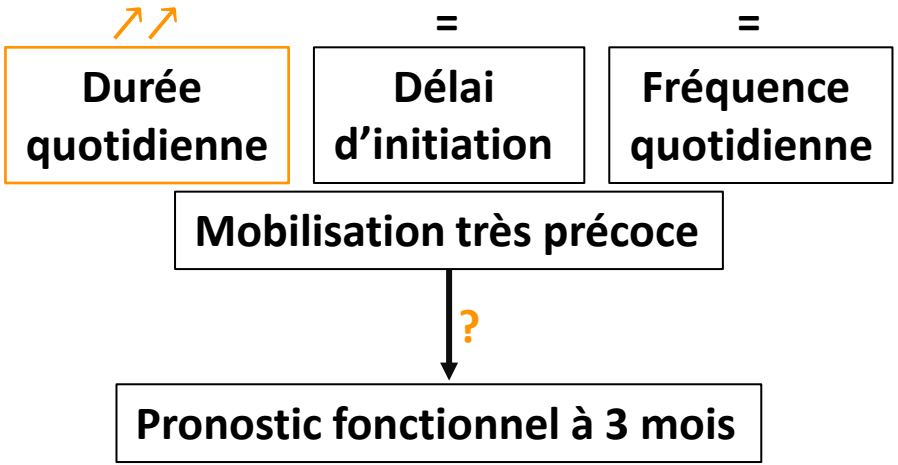

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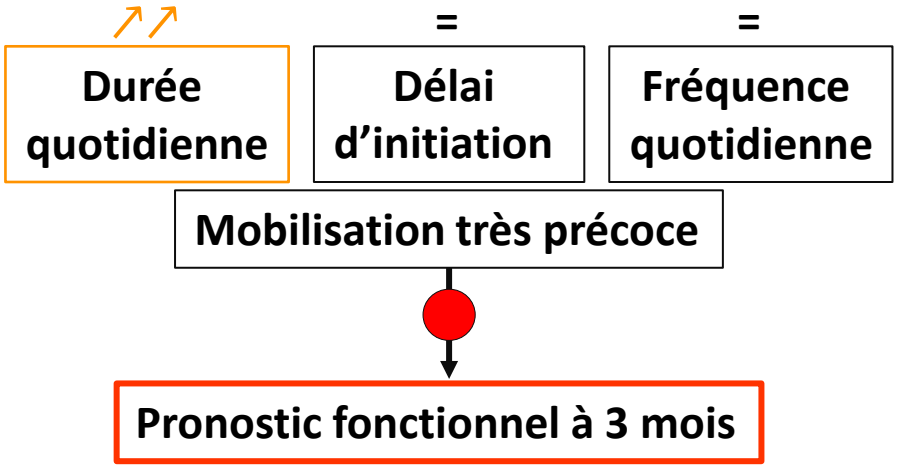

1 séance longue journalière : délétère pour le patient.

Langhorne et al., The Lancet, 2015

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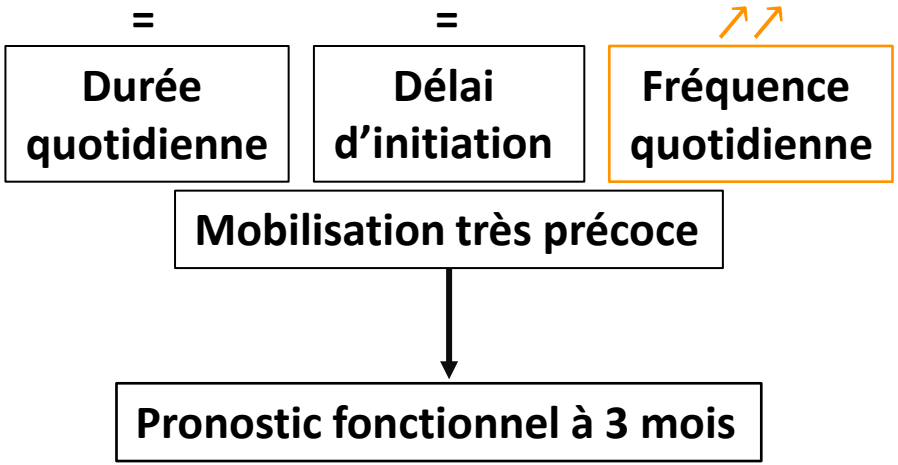

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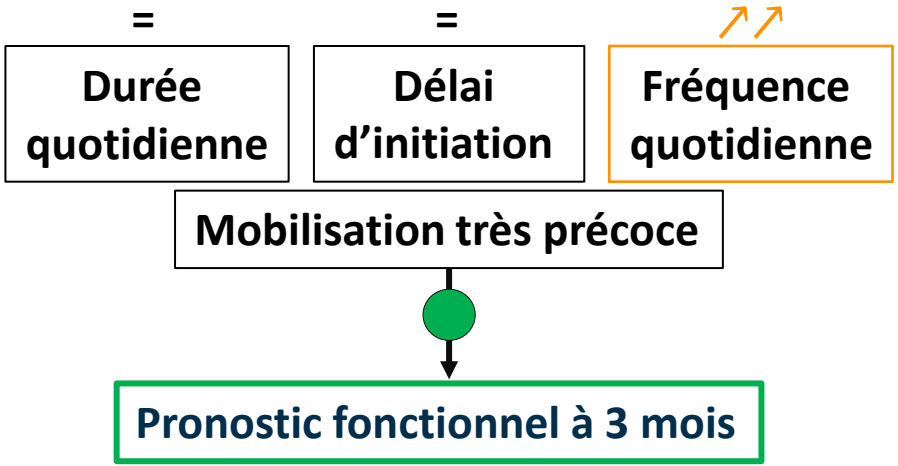

Langhorne et al., The Lancet, 2015

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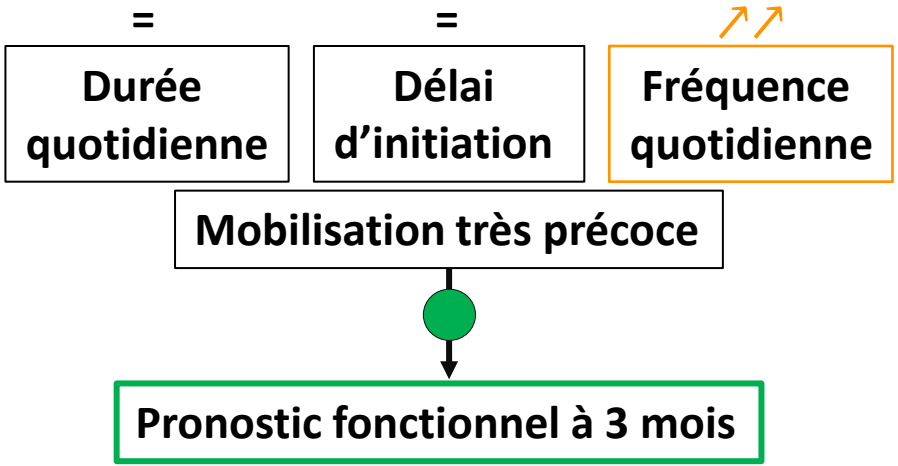

Plusieurs séances courtes : bénéfiques pour le patient.

Langhorne et al., The Lancet, 2015

neurocritical care society

Early Mobilization in the Neuro-ICU: How Far Can We Go?

Brian F. Olkowski[1] · Syed Omar Shah[2]

REVIEW

Recent evidence on early mobilization in critical-Ill patients

Kristina Fuest and Stefan J. Schaller

REVIEW

Early mobilization in neurocritical care patients

Monisha A. Kumar[a,b,c], Francisco G. Romero[a], and Kiruba Dharaneeswaran[a]

REVIEW

Rehabilitating the neurological patient in the ICU: what is important?

Sabrina Hernandez[a,b], Katherine Kittelty[c] and Carol L. Hodgson[a,c]

Review Article

Effectiveness, Safety, and Barriers to Early Mobilization in the Intensive Care Unit

Gopala Krishna Alaparthi,[1] Aishwarya Gatty,[2] Stephen Rajan Samuel,[2] and Sampath Kumar Amaravadi[2,3]

Table 2 Recommendations and considerations for early mobilization in the NICU

Diagnosis	Time to initiation	Intensity	Level of evidence*	Consideration	Solution
Acute ischemic stroke	24 h after symptom onset	No benefit to increased intensity during 24–48 h after symptom onset	2	HOB elevation within 24 h of symptom onset	HeadPoST/CHORUS to determine outcomes of head of bed elevation
				Maintain arterial hypertension	Close BP monitoring before, during and after mobilization. Consider mobilization if patient stable and not actively titrating parenteral vasopressors or antihypertensives
Aneurysmal Subarachnoid hemorrhage	24–48 h after aneurysm treatment	After aneurysm treatment, HOB elevation within 24–48 h and mobilization out of bed after 48 h	3	EVD	Ensure EVD securely placed and ICP levels consistently below 20 mmHg
				Asymptomatic vasospasm	If stable neurologic exam, should not preclude mobilization
				Single ICP spike	ICP spike related to an acceptable reason (i.e., during bowel movement, needle insertion) should not preclude mobilization

Olkowski, Neurocrit Care, 2017

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Spontaneous Intracerebral hemorrhage	24 h after stable ICH volume	Unknown	3	BP fluctuations	Ensure proper control of BP with oral or continuous medications prior to mobilization
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Spinal cord injury	24 h after spine stabilization	Unknown	5	Orthostatic hypotension	Close BP monitoring before, during and after mobilization. Consider mobilization if patient stable and not actively titrating vasopressors
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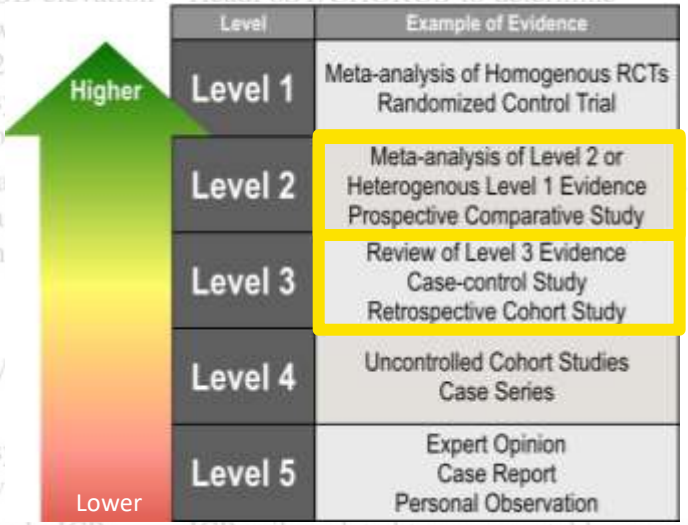

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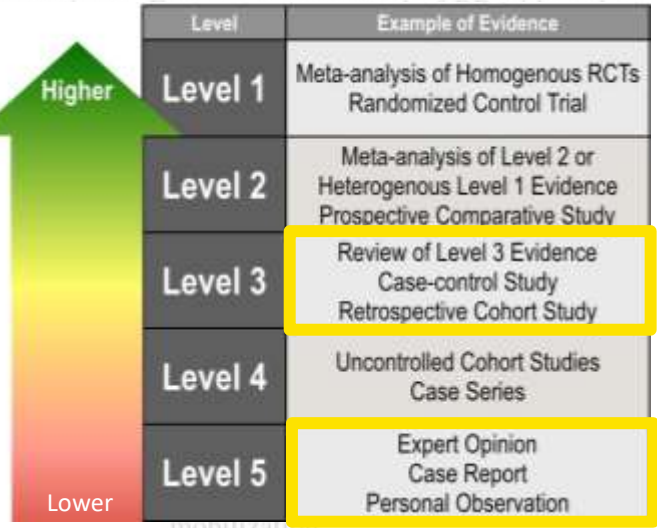
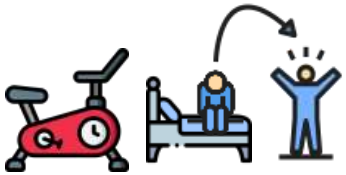


Olkowski, Neurocrit Care, 2017

La kinésithérapie motrice

Quand peut débuter la kinésithérapie motrice ?

Attendre 24h



Progessivité
Protocoliser

Avec quels moyens ?

À quelle fréquence ?

À quelle intensité ?

Plusieurs séances courtes chaque jour ?

Merci de votre attention

Contact : adela.foudhaili@aphp.fr

AP-HP. Nord Université Paris Cité

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