

Le lavage articulaire dans la gonarthrose. Est-ce utile?

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Introduction

- Théoriquement le lavage articulaire agirait par:
 - Évacuation des débris cartilagineux et des cristaux.
 - Évacuation des protéases et des cytokines.
 - Diminution de la distension capsulaire.
 - Infiltration des corticoïdes en fin de lavage.

- Pratique très répondeue

Recommandations

ACR : *Pas de recommandation.*

EULAR : *Pas de recommandation.*

OARSI

24- *Le rôle du lavage articulaire et du débridement arthroscopique sont controversés. Bien que certaines études aient montré un effet symptomatique à court terme, d'autres suggèrent que cette amélioration pourrait être liée à l'effet placebo.*

Est-ce utile = Efficace ?

- **Effet du lavage sur la douleur :**
EVA, WOMAC douleur
- **Effet du lavage sur la fonction :**
WOMAC fonction et LESQUENE
- **Comparaison des effets du lavage aux autres moyens thérapeutiques:**
 - *AINS*
 - *Antalgiques*
 - *Infiltration cortisonique*

Littérature

Grande disparité des études :

- Les critères d'évaluation
- Les groupes de patients étudiés
 - ▶ Indication du lavage
 - ▶ Les groupes contrôles
- Les techniques de lavage utilisées
 - ▶ Voies d'abord
 - ▶ La quantité du liquide

Littérature

EFFECTS OF JOINT LAVAGE AND STEROID INJECTION IN PATIENTS WITH OSTEOARTHRITIS OF THE KNEE

Results of a Multicenter, Randomized, Controlled Trial

PHILIPPE RAVAUD, LAURENCE MOULINIER, BRUNO GIRAUDEAU, XAVIER AYRAL,
CORINNE GUERIN, ERIC NOEL, PHILIPPE THOMAS, BRUNO FAUTREL,
BERNARD MAZIERES, and MAXIME DOUGADOS

Objective. To evaluate the efficacy of joint lavage and intraarticular steroid injection, alone and in combination, in the treatment of patients with symptomatic knee osteoarthritis (OA).

Methods. Ninety-eight patients with painful tibiofemoral OA were enrolled in a prospective, randomized, controlled, 2×2 factorial-design trial of 6 months' duration. The 4 treatment groups consisted of 1) intraarticular placebo (1.5 ml of 0.9% normal saline), 2) intraarticular corticosteroids (3.75 mg of cortivazol in 1.5 ml), 3) joint lavage and intraarticular placebo, and 4) joint lavage and intraarticular corticosteroid.

corticosteroid injection was associated with a decrease in pain only at week 1 ($P = 0.003$) and week 4 ($P = 0.020$). After week 4, Lequesne's functional index was not significantly improved regardless of the assigned treatment.

Conclusion. Compared with placebo, both treatments significantly relieved pain but did not improve functional impairment. The effects of the 2 treatments were additive. Cortivazol provided short-term relief of pain (up to week 4). The effects of joint lavage persisted up to week 24.

Littérature

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1063–4584/00/060412+07 \$35.00/0

Osteoarthritis and Cartilage

Journal of the OsteoArthritis Research Society International



Visually-guided irrigation in patients with early knee osteoarthritis: a multicenter randomized, controlled trial

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Summary

Objective: To determine if visually-guided arthroscopic irrigation is an effective therapeutic intervention in patients with early knee osteoarthritis.

Design: Ninety patients with knee osteoarthritis were randomized in a double-blind fashion to receive either arthroscopic irrigation with 3000 ml of saline (treatment group) or the minimal amount of irrigation (250 ml) required to perform arthroscopy (placebo group). The primary outcome variable was aggregate WOMAC score.

Results: The study did not demonstrate an effect of irrigation on arthritis severity as measured by aggregate WOMAC scores, the primary outcome variable; the mean change in aggregate WOMAC score at 12 months was 15.5 (95% CI 7.7, 23.4) for the full irrigation group

Littérature

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A CONTROLLED TRIAL OF ARTHROSCOPIC SURGERY FOR OSTEOARTHRITIS OF THE KNEE

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ABSTRACT

Background Many patients report symptomatic relief after undergoing arthroscopy of the knee for osteoarthritis, but it is unclear how the procedure achieves this result. We conducted a randomized, placebo-controlled trial to evaluate the efficacy of arthroscopy for osteoarthritis of the knee.

Methods A total of 180 patients with osteoarthritis of the knee were randomly assigned to receive arthroscopic débridement, arthroscopic lavage, or placebo

WHEN medical therapy fails to relieve the pain of osteoarthritis of the knee, arthroscopic lavage or débridement is often recommended. More than 650,000 such procedures are performed each year¹ at a cost of roughly \$5,000 each. In uncontrolled studies of knee arthroscopy for osteoarthritis, about half the patients report relief from pain.²⁻¹⁶ However, the physiological basis for the pain relief is unclear.

There is no evidence that arthroscopy improves

Littérature

Rheumatology 2003;42:1477-1485

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A randomized placebo-controlled trial of arthroscopic lavage versus lavage plus intra-articular corticosteroids in the management of symptomatic osteoarthritis of the knee

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Objective. To assess the efficacy of intra-articular steroid injections following arthroscopy and joint lavage in symptomatic OA of the knee.

Methods. Seventy-seven patients with OA of the knee were randomized to receive either 120 mg methylprednisolone acetate (MPA) or placebo following arthroscopy. Clinical assessments included severity of pain on movement and at rest, stiffness, the presence of joint effusions, range of movement, WOMAC (Western Ontario and McMaster Universities Osteoarthritis Index) score and Lequesne

Littérature

Curr Med Res Opin. 2004 Jun;20(6):861-7.

Assessment of the efficacy of joint lavage versus joint lavage plus corticoids in patients with osteoarthritis of the knee.

Frías G, Caracuel MA, Escudero A, Rumbao J, Pérez-Gujo V, del Carmen Castro M, Font P, González J, Collantes E.

Rheumatology Service, 'Reina Sofía' University Hospital, Córdoba, Spain.

PURPOSE: Joint lavage (JL), involves the passage of cold sterile 0.9% saline through the knee joint in order to have the fluid reach the inside of the joint capsule. This technique was evaluated as a local treatment for osteoarthritis (OA) of the knee alone (JL) and in combination with intra-articular infiltration with glucocorticoids (JLC). **PATIENTS AND METHODS:** An overall 299 knees belonging to 205 patients (22% males, 78% females) with a mean age of 67 +/- 8 years and osteoarthritis of the knee of radiological grade II or III on the Kellgren scale were randomised in the ratio of 1:4 into two therapeutic groups, namely: JL (n = 62) and JLC (n = 237). All patients received joint lavage on day 0; in those of the JLC group, joint lavage was followed by infiltration of 40 mg of triamcinolone acetonide. The efficacy of both treatments was assessed by recording the corresponding

Littérature

Management of Knee Osteoarthritis: Knee Lavage Combined With Hylan Versus Hylan Alone

Vijay B. Vad, MD, Atul L. Bhat, MD, Thomas P. Sculco, MD, Thomas L. Wickiewicz, MD

ABSTRACT. Vad VB, Bhat AL, Sculco TP, Wickiewicz TL. Management of knee osteoarthritis: knee lavage combined with hylan versus hylan alone. *Arch Phys Rehabil* 2003;84:634-7.

Objective: To assess the difference in efficacy between knee lavage plus the standard hylan G-F 20 (a derivative of hyaluronan) protocol and the standard hylan G-F 20 as per standard usage protocol alone for the treatment of knee osteoarthritis (OA).

Design: Nonrandomized prospective study in which patients chose their treatment group. Follow-up averaged 1.1 years.

Setting: Faculty practice of a single physician at a major teaching hospital.

Participants: Eighty-one patients with documented knee OA on magnetic resonance imaging.

Interventions: Group 1 (n=44) received a single-needle lavage 1 week before the standard hylan G-F 20 protocol; group 2 (n=37) received the standard hylan G-F 20 protocol alone.

Main Outcome Measures: Pre- and posttreatment scores on the Lysholm-II Questionnaire and a visual analog scale (VAS) were documented for each patient. The Wilcoxon signed-rank test was used for statistical analysis.

Results: A successful outcome was noted in 79.5% of group

management of pain associated with knee OA. These options include pharmacologic management with analgesics, nonsteroidal anti-inflammatory medications and the newer cyclooxygenase-2 inhibitors, orthotics, physical modalities, physical therapy, intra-articular injections of corticosteroids, viscosupplementation, arthroscopic joint débridement, joint lavage, and total knee replacement.²⁻²⁶ New advances such as joint lavage and viscosupplementation may be helpful in getting people active earlier as compared with conventional treatments.

Individual beneficial effects of viscosupplementation with hylan G-F 20 (a derivative of hyaluronan) and knee lavage have been studied separately in the management of pain in patients with knee OA.^{2-5,8,9,12,14-20,22,25} However, no single study has compared the combined use of knee-joint lavage before viscosupplementation with the standard viscosupplementation protocol (1 injection at weekly intervals for 3wk) alone.

The purpose of the present study was 2-fold: (1) to determine whether a single-needle knee lavage 1 week before the standard 3-week injection protocol was associated with greater clinical effectiveness in the treatment of knee OA than the standard hylan G-F 20 protocol alone, and (2) to identify the negative prognostic criteria for patients with knee OA who might not benefit from knee lavage combined with hylan G-F 20 or hylan G-F 20 alone.

Littérature

RHEUMATOLOGY

Rheumatology 2010;49:334–340

doi:10.1093/rheumatology/kep382

Advance Access publication 2 December 2009

Original article

Efficacy of joint lavage in knee osteoarthritis: meta-analysis of randomized controlled studies

Jérôme Avouac¹, Eric Vicaut², Thomas Bardin¹ and Pascal Richette¹

Abstract

Objective. Regarding the efficacy of joint lavage in the treatment of knee OA, we evaluated reports of randomized controlled trials (RCTs) to assess the efficacy of joint lavage alone or joint lavage combined with IA steroid injection to alleviate pain and improve function in knee OA.

Methods. We searched MEDLINE, EMBASE and the Cochrane Central Register of Controlled Trials for all

Medline, Embase, Cochrane.

Base de données et recherche manuelle

49 publications

Publications exclues

- Essais non randomisés non contrôlés n: n =14
- Ne concernant pas le lavage articulaire : n=13
- Autres que l'arthrose : n= 12
- Groupe contrôle non approprié : n = 3
- Résultat ne permettant pas de calculer l'effet size : n= 1

6 études

Study	No. of randomized patients	Design	Overall follow-up duration (weeks)	Treatments	Outcome extracted pain function	Jadad score (0-5)
Ravaud <i>et al.</i> [17]	98	Parallel, four arms	24	JL (1000 ml) + placebo vs JL + corticoid vs corticoid vs placebo	Pain (VAS) Lequesne index	3/5 (R = 2, B = 0, W = 1)
Kalunian <i>et al.</i> [19]	90	Parallel, two arms	52	JL (3000 ml) vs minimal irrigation (250 ml)	WOMAC pain WOMAC function	3/5 (R = 1, B = 2, W = 0)
Moseley <i>et al.</i> [18]	121	Parallel, three arms	104	JL (10 l) vs placebo vs debridement	KSPS AIMS2	5/5 (R = 2, B = 2, W = 1)
Bradley <i>et al.</i> [20]	180	Parallel, two arms	52	JL (1000 ml) vs placebo	WOMAC pain WOMAC function	5/5 (R = 2, B = 2, W = 1)
Smith <i>et al.</i> [21]	77	Parallel, two arms	24	JL + corticoid vs JL + placebo	Pain (VAS) Lequesne index	5/5 (R = 2, B = 2, W = 1)
Frias <i>et al.</i> [22]	205	Parallel, two arms	12	JL (3000 ml) + corticoid vs JL + placebo	Pain (VAS) Function: NA	1/5 (R = 1, B = 0, W = 0)

- 855 patients
- 511 groupe traitement
- 344 groupe contrôle,
 - Critères de l'ACR.
 - Deux groupes sont comparables pour l'âge et le sexe

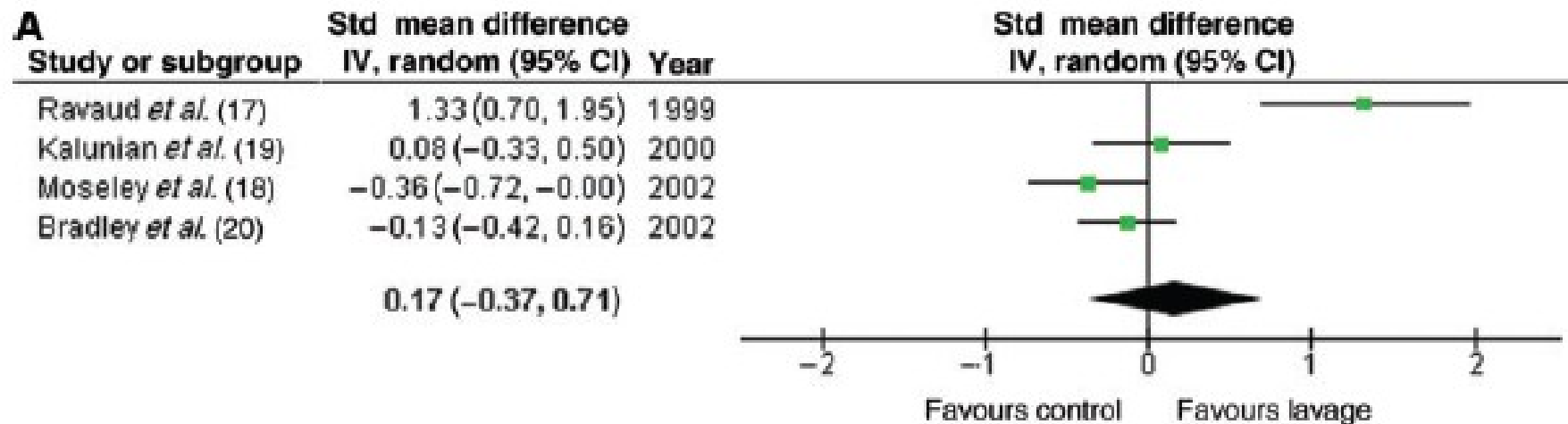
Effacité du lavage vs placebo sur la douleur

Effacité du lavage vs placebo sur la fonction

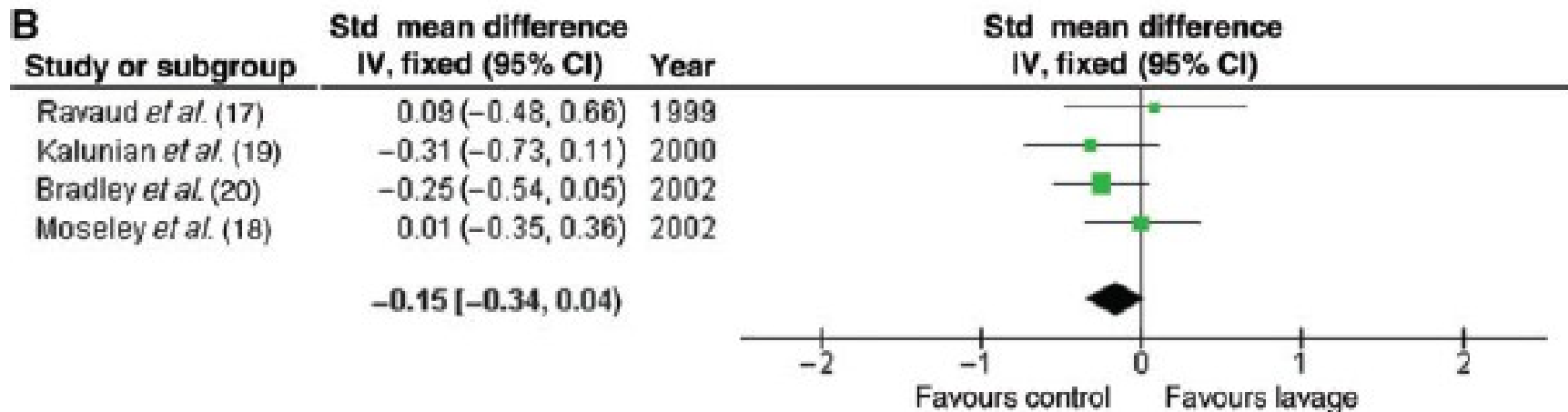
Effacité du lavage plus infiltration cortisonique vs lavage articulaire seul sur la douleur

Effacité du lavage plus infiltration cortisonique vs lavage articulaire seul sur la fonction

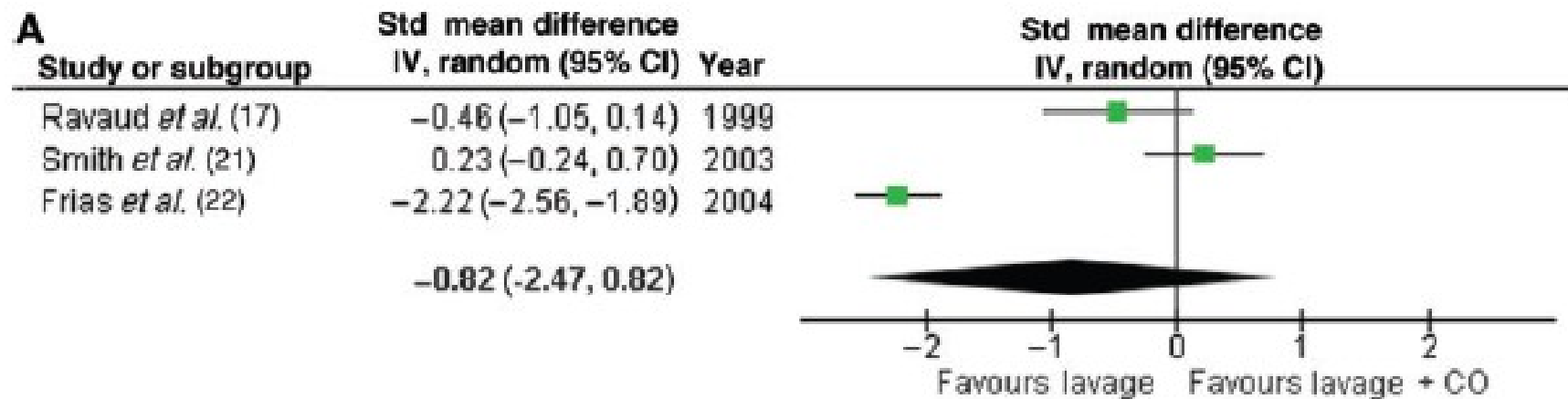
Efficacité du lavage vs placebo sur la douleur



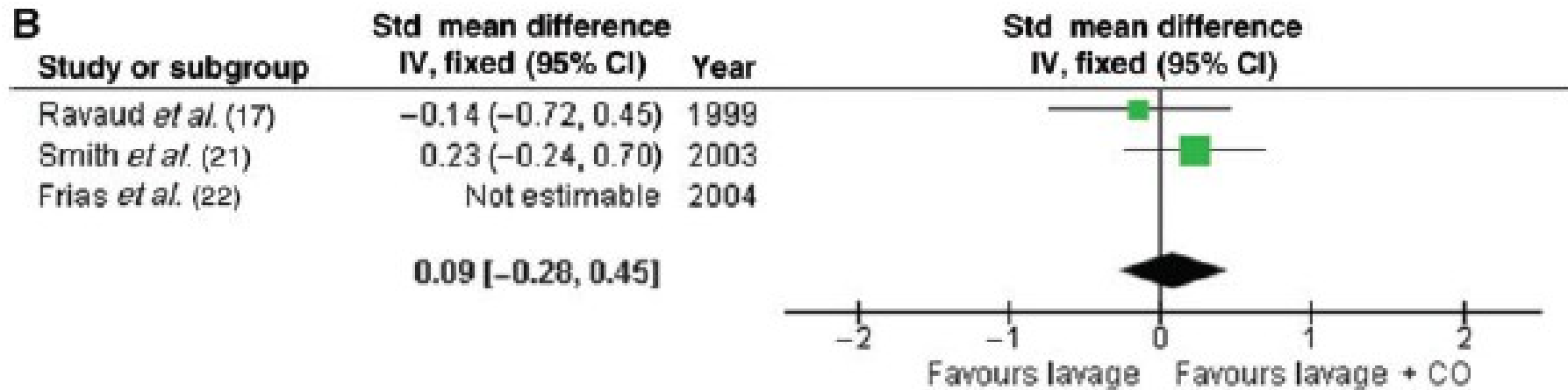
Effacité du lavage vs placebo sur la fonction



Efficacité du lavage plus infiltration cortisonique vs lavage articulaire seul sur la douleur



Efficacité du lavage plus infiltration cortisonique vs lavage articulaire seul sur la fonction



Résultats

- Absence d'effet cliniquement pertinent du lavage articulaire comparé au placebo sur la douleur et la fonction dans le traitement de la gonarthrose.
- L'infiltration cortisonique ne semble pas améliorer l'effet du lavage.

Limites de ce travail

- Hétérogénéité des moyens d'évaluations de la douleur et de la fonction dans les études analysées.
- Hétérogénéité des techniques de lavage
 - Lavage à deux voies
 - Lavage arthroscopique
 - Tidal irrigation

Study	No. of randomized patients	Design	Overall follow-up duration (weeks)	Treatments	Outcome extracted pain function	Jadad score (0-5)
Ravaud <i>et al.</i> [17]	98	Parallel, four arms	24	JL (1000 ml) + placebo vs JL + corticoid vs corticoid vs placebo	Pain (VAS) Lequesne index	3/5 (R = 2, B = 0, W = 1)
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Frias <i>et al.</i> [22]	205	Parallel, two arms	12	JL (3000 ml) + corticoid vs JL + placebo	Pain (VAS) Function: NA	1/5 (R = 1, B = 0, W = 0)

Limites de ce travail

- L'épanchement articulaire n'est pas un critère d'inclusion aux différentes études.
- Pas de distinction entre les différents type d'arthrose.
- Pas d'étude de sous groupes qui permettrait d'identifier les profils d'arthrose qui répondraient au mieux au lavage.
- Faible nombre des études diminue la puissance de la méta-analyse.

Limites de ce travail

- *Centre de référence*
- *Cochin Paris*
- *Université de Californie, Los Angeles*
- *Centre Médical. Adelaide. Australie*
- Département de chirurgie Orthopédique

Oui ou Non?

***Si le doute est un moyen de se préparer à connaître,
c'en est un aussi de se tromper : j'ai douté à tort quelquefois.***

Jules LEQUIER

1814-1862

*Extrait de « **Le problème de la science** »*

Je vous remercie