



SPINE
CENTER
EDUCATION



Fascial Manipulation®
Stecco®

15/16
OTTOBRE
2022

Il metodo Stecco MANIPOLAZIONE FASCIALE ®

FASCIA

anatomia, valutazione e trattamento

Ft. Mirco Branchini

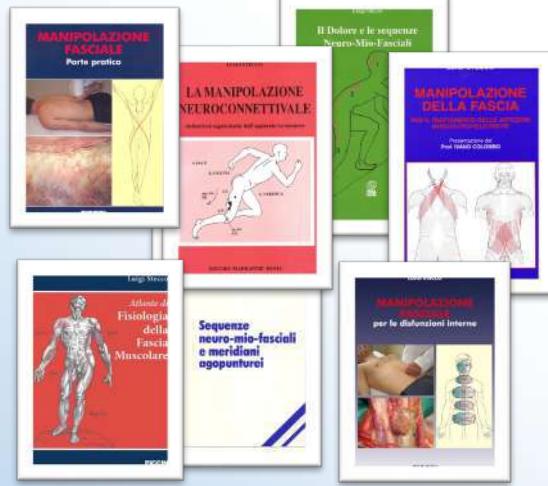
La Manipolazione Fasciale in 20'



✓ Why does Fascia matter

✓ What's new about FM treatment

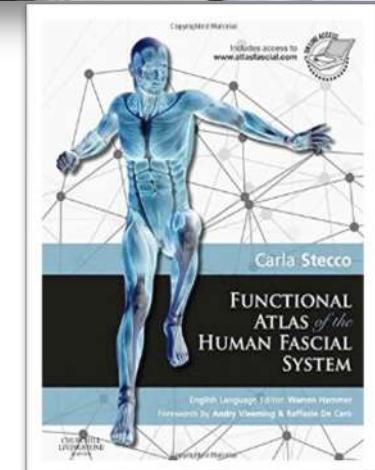
✓ Reliability and effectiveness of FM treatment



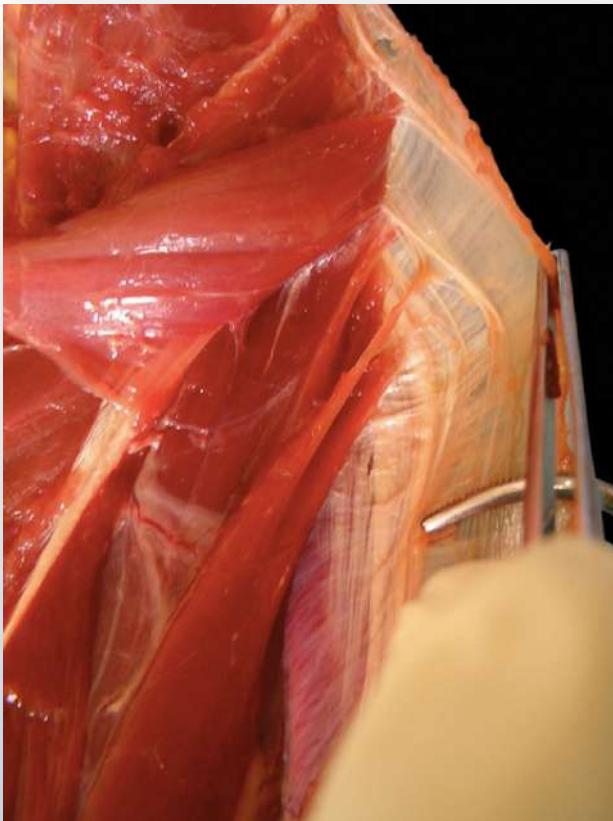
Luigi

Carla

Antonio



Why does Fascia matter



Up to 37% muscle fibers take insertion into fascia

Fascia is a fibrous collagenous tissues which is part of a bodywide tensional force transmission system

Huijing P. 1999 Muscular force transmission: a unified, dual or multiple system? A review and some explorative experimental results. Arch Physiol Biochem. Oct;107(4):292-311. Review.

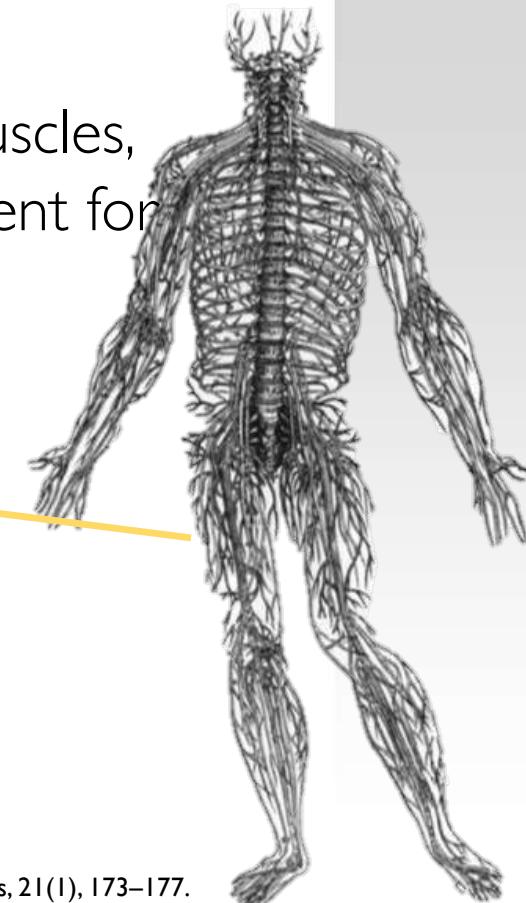
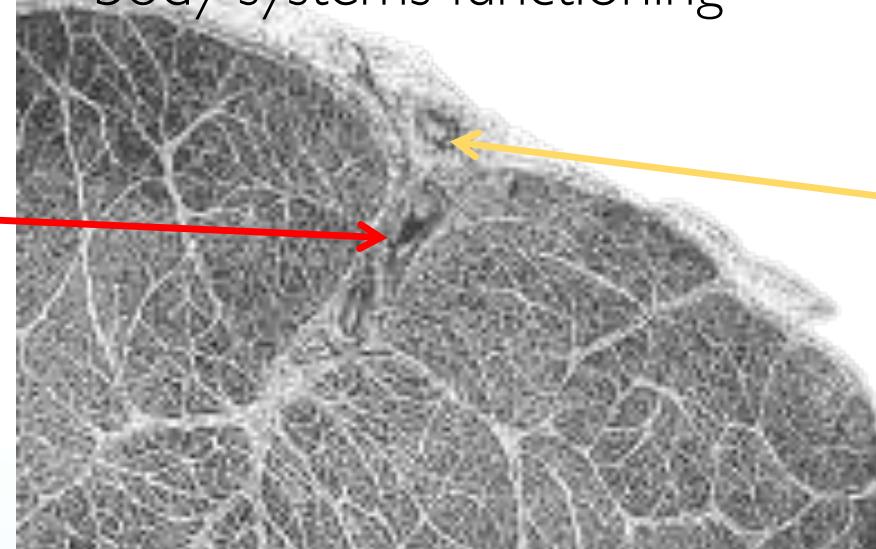
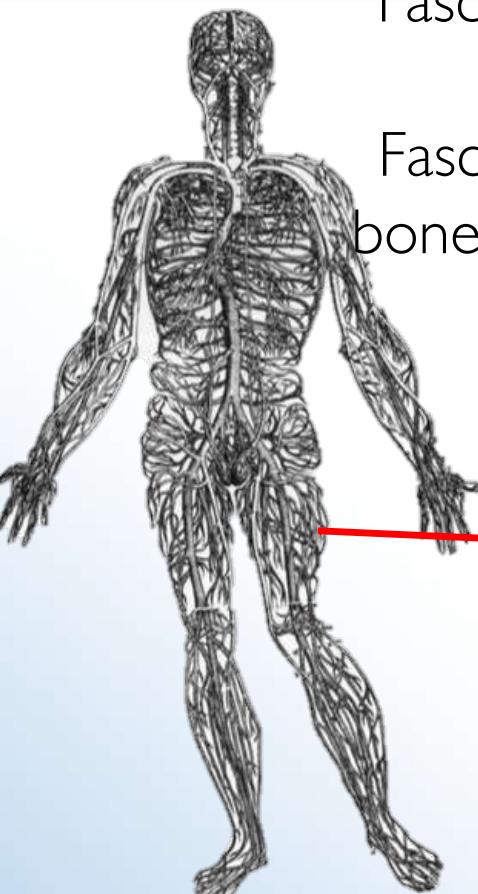
Fascia Research Congress 2012

Why does Fascia matter



“Fascia forms a whole-body **continuous three-dimensional matrix** of structural support.

Fascia **interpenetrates and surrounds all** organs, muscles, bones and nerve fibers, creating a unique environment for body systems functioning”



Adstrum, S., Hedley, G., Schleip, R., Stecco, C., & Yucesoy, C.A. (2017). Defining the fascial system. *Journal of Bodywork and Movement Therapies*, 21(1), 173–177.

Why does Fascia matter



FASCIA
(Tess. connettivo
propriam. detto)

CELLULE

Fibroblasti, Adipociti,
Macrofagi, Mastociti,
Cellule mesenchimali
indifferenziate

Funzioni
metaboliche
e difensive

FIBRE

Collagene, Reticolari,
Elastiche

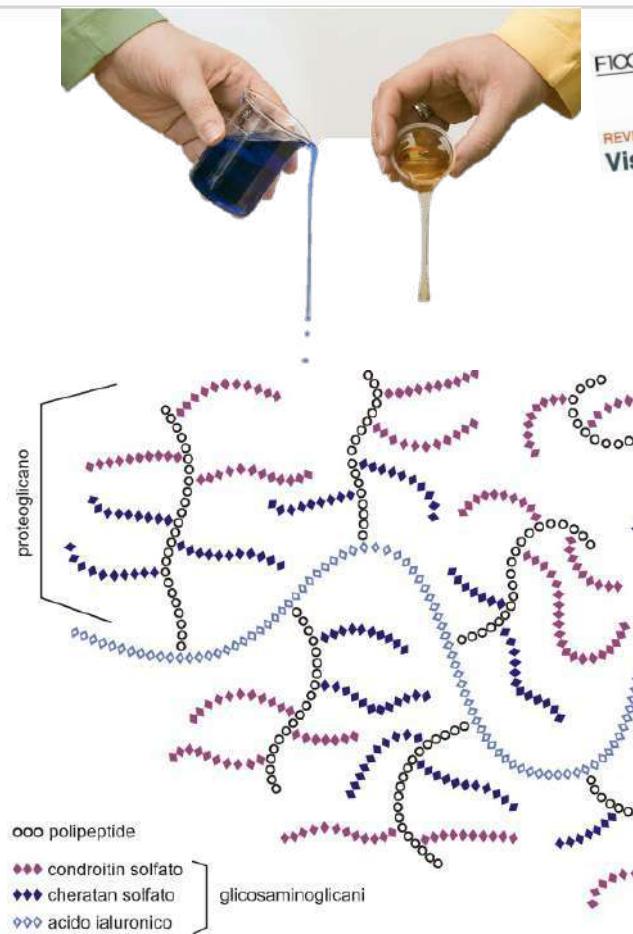
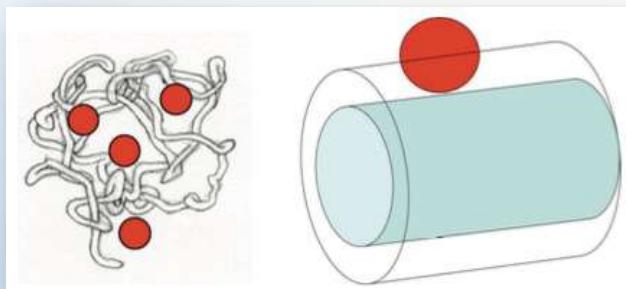
Funzioni
meccaniche e
difensive

**SOSTANZA
FONDAMENT.**

Glicosamminoglicani
(Ac. Ialuronico)
Acqua
Ioni

Funzioni
metaboliche
visco-
plastiche

Why does Fascia matter



F1000Research

REVIEW

Viscoelastic Properties of Hyaluronan in Physiological

F1000Research 2015, 4:62 Last updated: 14 SEP 2015



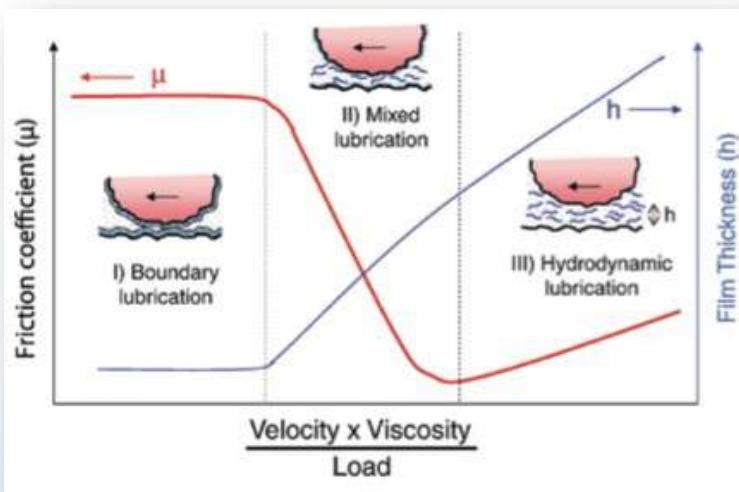
Macromolecole di
A.I. aumentano la
viscosità della
fascia, la resistenza
alle sollecitazioni e
la tensione dei
tessuti in essa
inseriti

Why does Fascia matter



Fascial Manipulation®
Stecco®

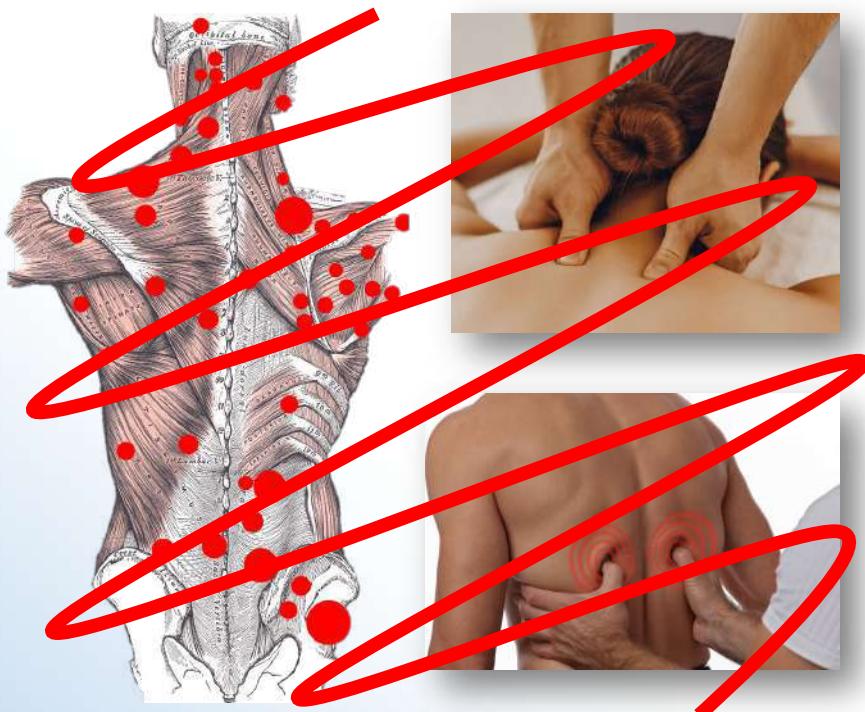
F1000Research 2015, 4:622 Last updated: 14 SEP 2015
REVIEW
Viscoelastic Properties of Hyaluronan in Physiological
CrossMark
click for updates



Una frizione in grado di sviluppare calore $\geq 40^\circ$ è in grado di ristabilire la fluidità della fascia

L'attrito è più efficace se condotto nelle aree di maggior resistenza, ovvero dove la fascia scorre meno

What's new about FM treatment



MANIPOLAZIONE FASCIALE

- ✓ Trattamento causalgico e non sintomatico
- ✓ Raccolta anamnestica
- ✓ Doppia valutazione (motoria e palpatoria)
- ✓ Individuazione della organizzazione motoria in disfunzione
- ✓ Trattamento manuale con risoluzione dell'alterazione tissutale
- ✓ Rivalutazione motoria

What's new about FM treatment



Anatomy: A Regional Atlas of the Human Body - C. D. Clemente

Anatomy: A Photographic Atlas - L. W. Rohen



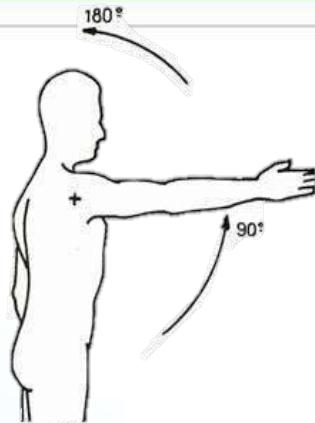
No muscle
is a
function unit



Functional Atlas of the Human Fascial System - C. Stecco

Shleip R., 2003

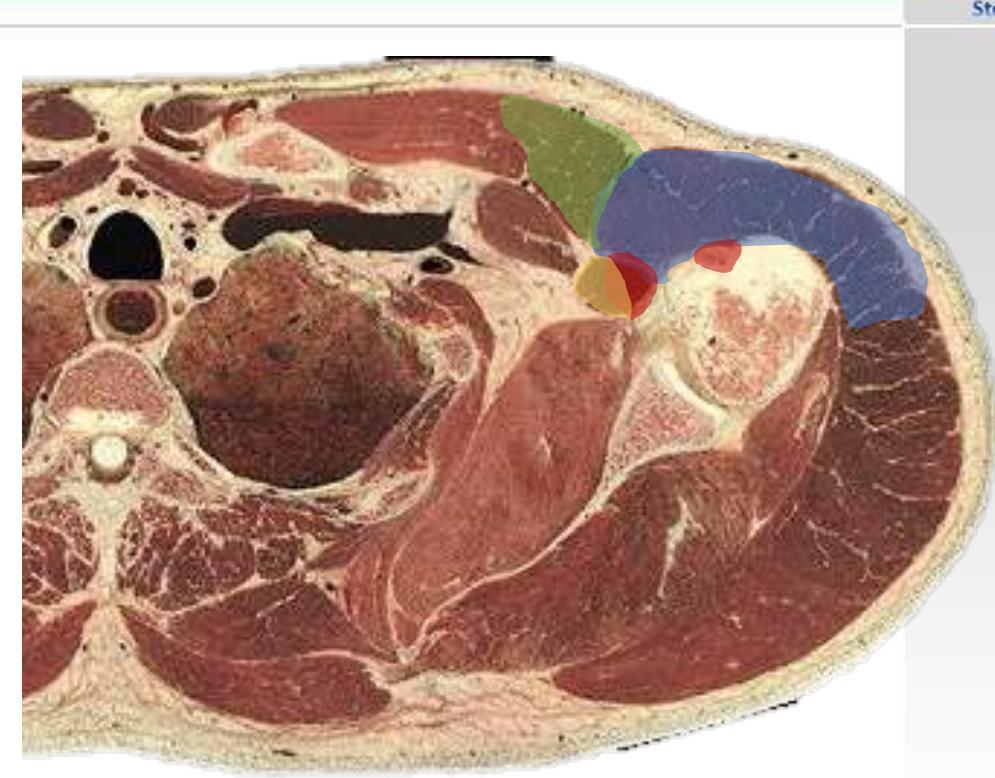
What's new about FM treatment



Deltoid
anteriore , Gr.
Pettorale
claveare
C.L e B. bicipite,
Coracobrachiale

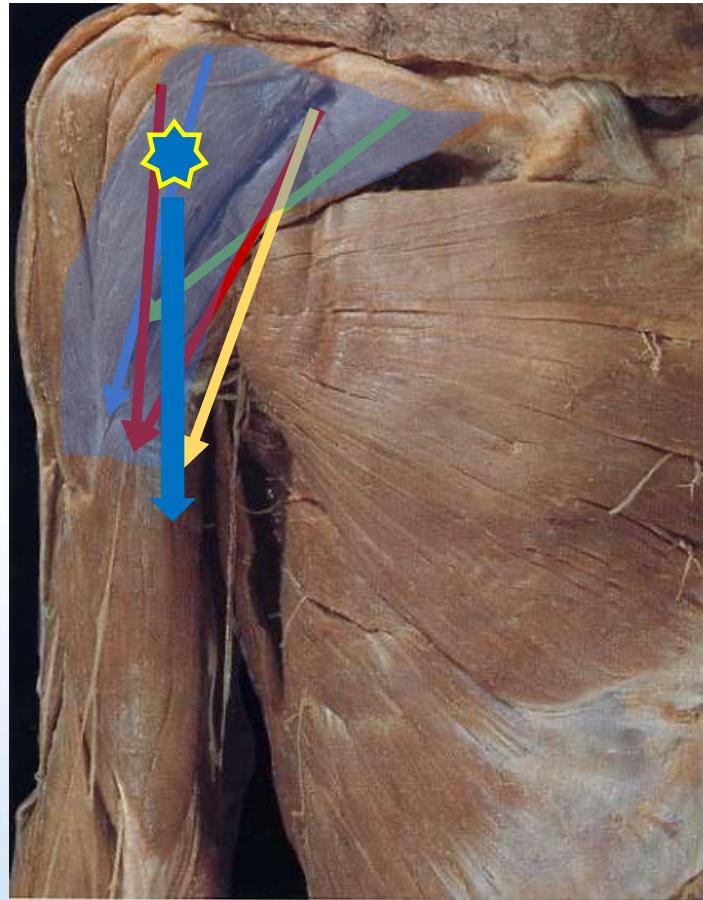


Fascia deltoideo-
pettorale



= **UMF di AN-HU**

What's new about FM treatment



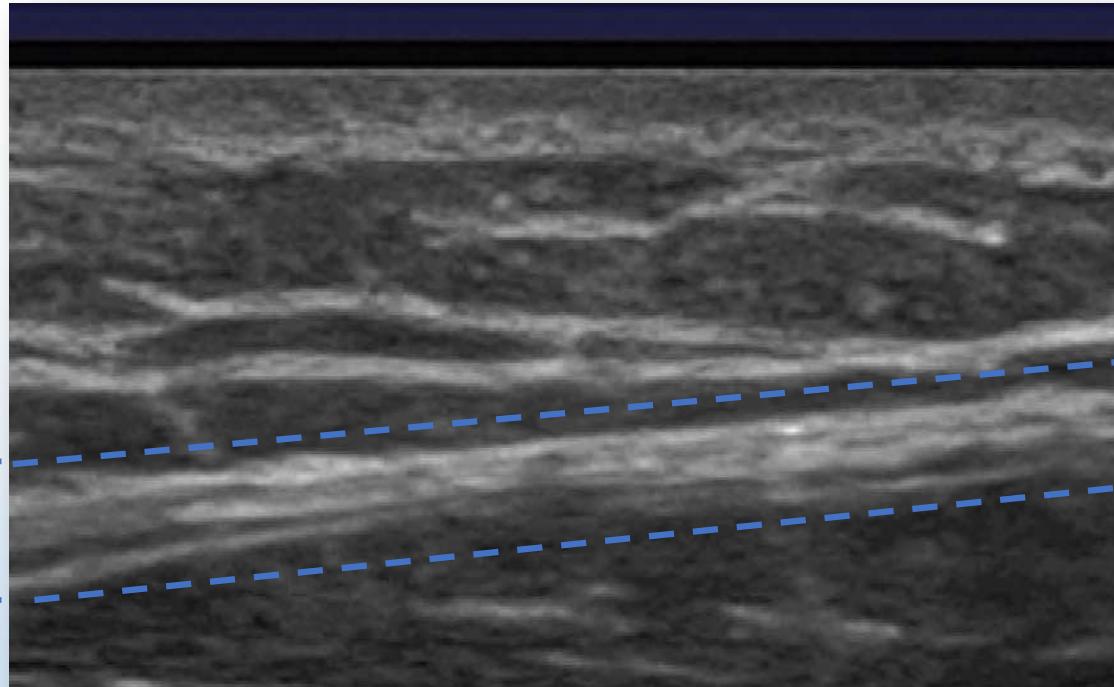
Centro di Coordinazione AN-HU

Sulla fascia deltoideo-pettorale,
tra i due capi del bicipite, nelle
fibre del deltoide anteriore
sotto l'acromion

What's new about FM treatment



I CC sono localizzati nella F. Profonda



La loro alterazione:

Modificazione della ECM con
aggregazione di Ac. Ialuronico
= **densificazione**

Riduzione dello scorrimento
dei piani della F. profonda

Riduzione del ROM, dolore,
infiammazione

What's new about FM treatment



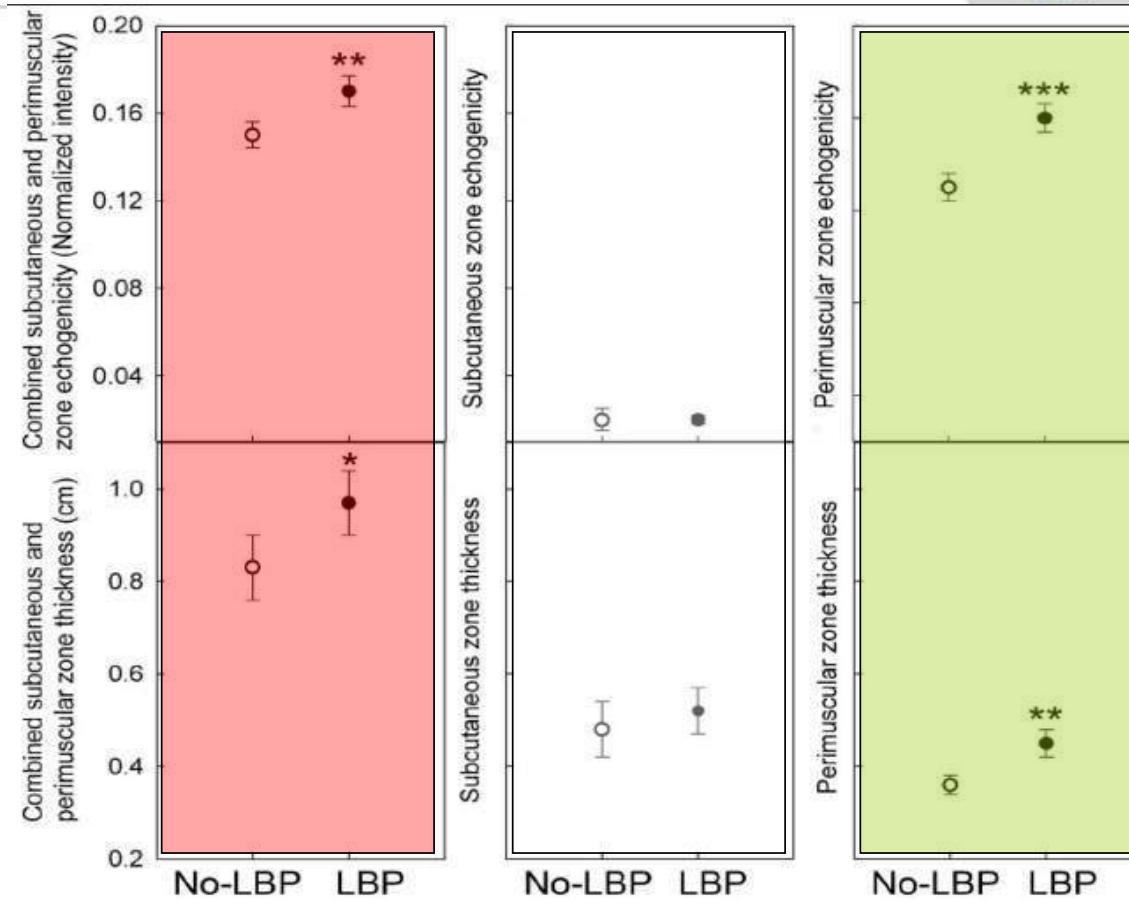
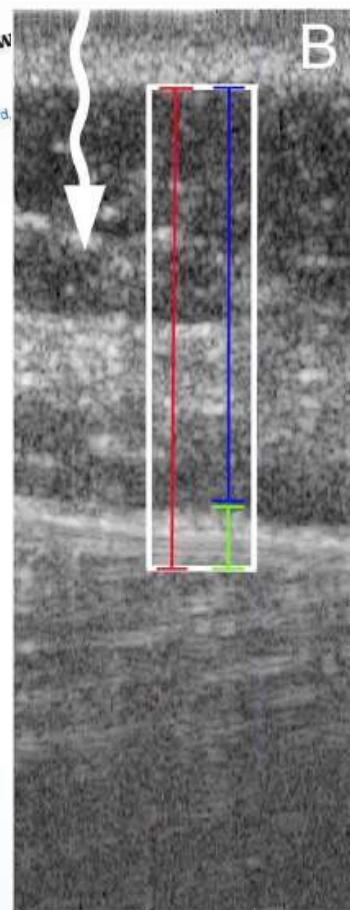
> BMC Musculoskelet Disord. 2009 Dec 3;10:151. doi: 10.1186/1471-2474-10-151.

Ultrasound evidence of altered lumbar connective tissue structure in human subjects with chronic low back pain

Hélène M Langevin¹, Debbie Stevens-Tuttle, James R Fox, Gary J Badger, Nicola A Boutteard, Martin H Krag, Junru Wu, Sharon M Henry
Affiliations + expand
PMID: 19958536 PMCID: PMC2796643 DOI: 10.1186/1471-2474-10-151



*:p<0.05;
**:p<0.01;
***:p<0.001



Reliability and effectiveness of FM treatment

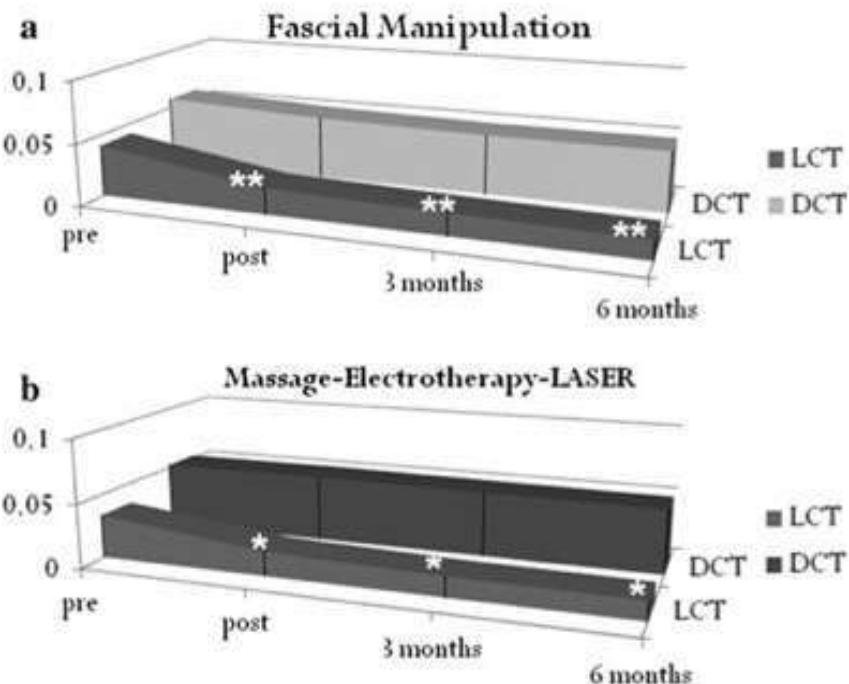


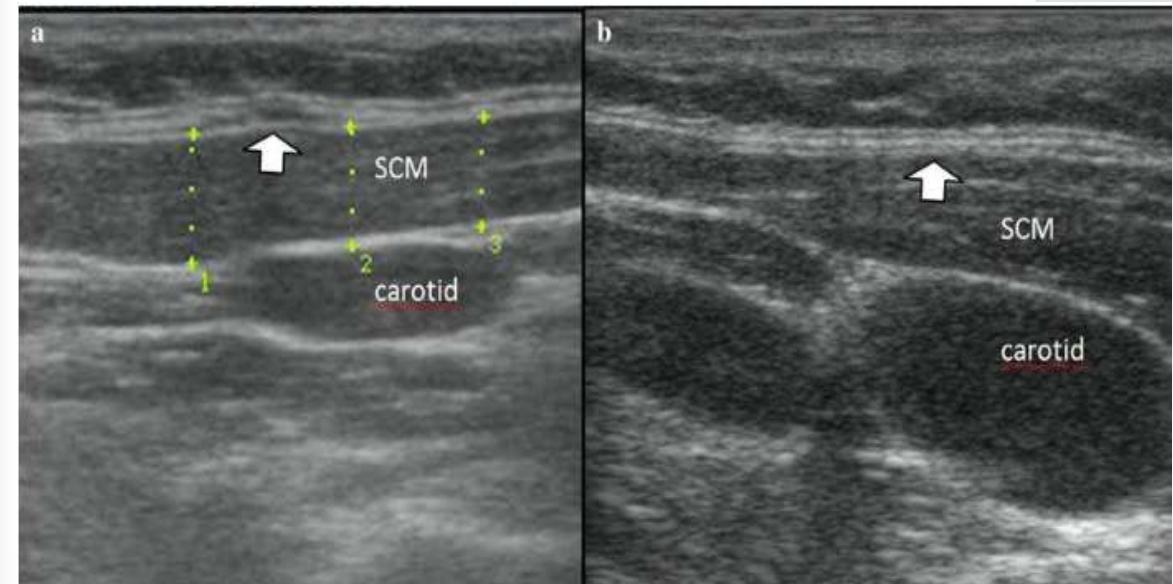
Fig. 8 **a** Mean thickness of loose and dense connective tissues in FM group. **b** Mean thickness of loose and dense connective tissues in MEL group (* P value <0.05 ; ** P value <0.001)

Surg Radiol Anat
DOI 10.1007/s00276-013-1185-2

ORIGINAL ARTICLE

Ultrasonography in myofascial neck pain: randomized clinical trial for diagnosis and follow-up

Antonio Stecco · Andrea Meneghini · Robert Stern · Carla Stecco · Marta Imamura



Reliability and effectiveness of FM treatment

Surg Radiol Anat
DOI 10.1007/s00276-013-1185-2

ORIGINAL ARTICLE

Ultrasonography in myofascial neck pain: randomized clinical trial for diagnosis and follow-up

Antonio Stecco · Andrea Meneghini ·
Robert Stern · Carla Stecco · Marta Iamamura

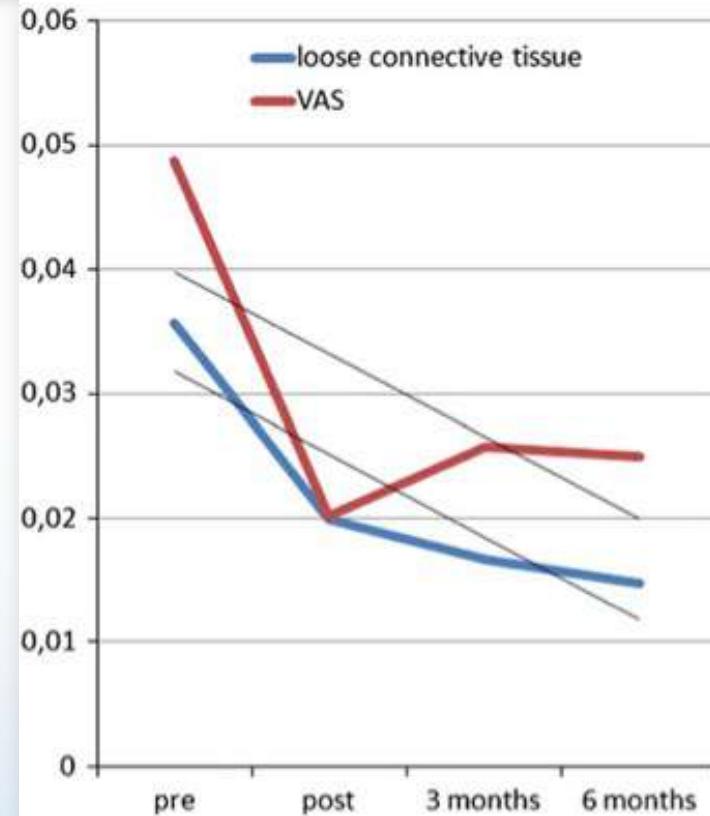
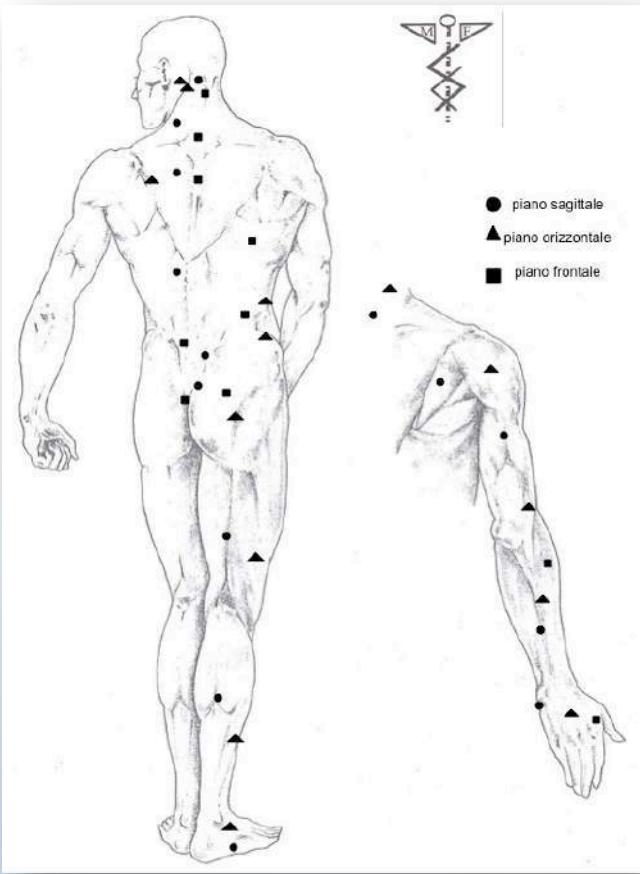


Table 6 Difference in thickness between the evalua

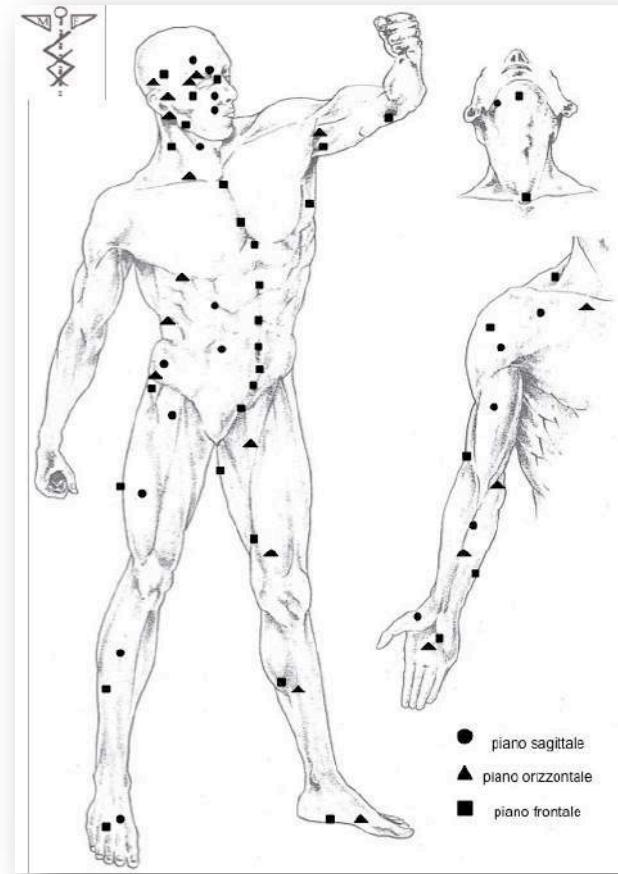
	Post		
	LCT	DCT	P value LCT
elm	0.0424	1	0.0424
fm	0.0018	0.5035	0.0018
6 months			
	LCT	DCT	P value LCT
	0.0277	0.5121	0.0277
	0.0067	0.4068	0.0067
3 months			
	LCT	DCT	P value LCT
	0.0415	0.6811	0.0415
	0.0044	0.2691	0.0044



What's new about FM treatment



Ogni
UMF
ha un suo
CC

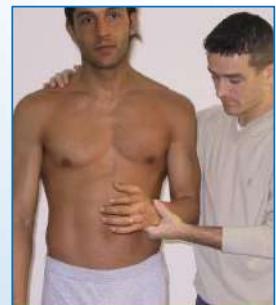


I CC sono
allineati
su
Sequenze
e Piani
motori

What's new about FM treatment



MANIPOLAZIONE FASCIALE



Valutazione motoria delle UMF

Valutazione palpatoria dei CC alterati

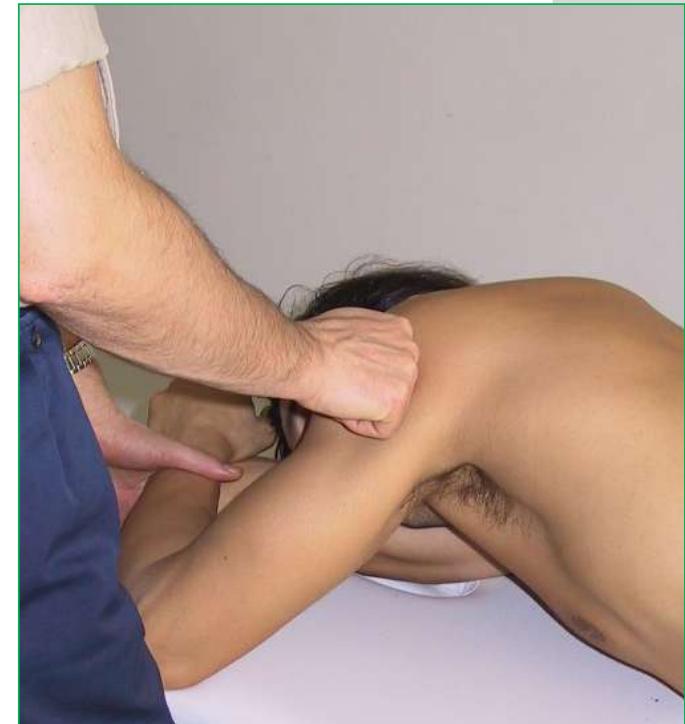
What's new about FM treatment



Trattamento

è la logica deduzione delle positività dei precedenti step. Oltre alla densificazione si ricerca:

- ✓ una sensibilità puntorea/irradiazione
- ✓ coerenza con l'anamnesi e le verifiche precedenti (piano motorio, diagonale, spirale)
- ✓ stimolo accettabile da parte della persona



Al termine del trattamento (in genere 3-4 CC) si realizzano le Verifiche Motorie precedentemente positive per "misurare" il risultato

Reliability and effectiveness of FM treatment



JOURNAL OF MANUAL & MANIPULATIVE THERAPY
<https://doi.org/10.1080/10669817.2019.1683675>



Check for updates

Inter and Intra Operator Reliability of Motor and Palpation Evaluation in Fascial Manipulation in individuals with coxarthrosis

Andrea Cotti^a, Massimiliano Del Corso^b, Roberto Diana^b, Luigi Cornale^b, Alessandra Sudanese^c, Antonio Stecco^d and Mirco Branchini^e

Population: subjects with HOA waiting for THA

Intervention: pre-surgical 3 FM sessions

Comparison: no treatment

Objective: Inter and Intra-rater reliability of Motor and Palpatory Assessment; Pain

Randomization: SG vs CG

Fascial Manipulation: 3 sessions

Outcome: NRS (pain) - ICC (reliability)



Reliability and effectiveness of FM treatment



JOURNAL OF MANUAL & MANIPULATIVE THERAPY
<https://doi.org/10.1080/10669817.2019.1683675>



Check for updates

Inter and Intra Operator Reliability of Motor and Palpation Evaluation in Fascial Manipulation in individuals with coxarthrosis

Andrea Cotti^a, Massimiliano Del Corso^b, Roberto Diana^b, Luigi Cornale^b, Alessandra Sudanese^c, Antonio Stecco^d and Mirco Branchini^e

T0 $\left[\begin{array}{l} \text{PtC} = \text{pain and randomization (SG-CG)} \\ \text{PtA} \leftarrow \rightarrow \text{PtB inter rater MV and PV reliability} \\ \text{Standardized grading 0-3} \end{array} \right]$



T1-T2-T3 PtA: 3 MF weekly treatments in SG

T4 $\left[\begin{array}{l} \text{PtB} \leftarrow \rightarrow \text{PtB intra rater MV and PV reliability} \\ \text{PtC} = \text{pain; PtD} = \text{data analysis} \\ (\text{pain and reliability with ITT: w.c.s.}) \end{array} \right]$



Reliability and effectiveness of FM treatment



JOURNAL OF MANUAL & MANIPULATIVE THERAPY
<https://doi.org/10.1080/10669817.2019.1683675>



Check for updates

Inter and Intra Operator Reliability of Motor and Palpation Evaluation in Fascial Manipulation in individuals with coxarthrosis

Andrea Cotti^a, Massimiliano Del Corso^b, Roberto Diana^b, Luigi Cornale^b, Alessandra Sudanese^c, Antonio Stecco^d and Mirco Branchini^e

71 subjects (36 SG; 35 CG)

Motor assessment (39 each): LU-PV-CX-GE = **4485**

Palpatory assessment (24 each): PV-CX = **2760**

Pre-treatment inter-rater reliability (blinded - ITT “last observation”)

CG: VM=0.95; VP=0.91; **SG:** VM=0.92; VP=0.91

Treatments: PV+CX= **43.5%**; CL+TH+LU+GE+TA+PE= **56.5%**

Post treatment intra-rater reliability (blinded - ITT “last observation”)

CG: VM=0.93; VP=0.84; **SG:** VM=0.82; VP=0.60

Pain (blinded - pre-post – ITT “worst case scenario”):

CG=-1.4; SG=-3.42 (p=0.01)

Reliability and effectiveness of FM treatment



- Fascial Manipulation Associated With Standard Compared to Only Standard Postsurgical Care for Total Hip Arthroplasty: A Randomized Controlled Trial**
Massimo Busato¹, Cri Mirco Branchini², Av...
Affiliations + expand
PMID: 27210234 doi: 10.3390/jeprh18157952.
- Fascial Manipulation Technique in the Conservative Management of Morton's Syndrome: A Pilot Study**
Carlo Biz¹, Carla Stecco², Ilaria Fontoni¹, Gianluca Aprile^{1,2}, Stefano Giacomini², ...
Affiliations + expand
- Ultrasoundography in myofascial neck pain: randomized clinical trial for diagnosis**
Antonio Stecco¹, Andrea Meneghini, Robert S...
Affiliations + expand
PMID: 23975091 doi: 10.23736/S1973-9087.17.04732-3.
- Evaluation of fascial manipulation in carpal tunnel syndrome: a pilot randomized clinical trial**
Aurore Thibaut³, Lucas M de Exel Nunes⁴, ...
Affiliations + expand
PMID: 23975091 doi: 10.1177/026993701246001001.
- Myofascial pain of the jaw muscles: comparison of short-term effectiveness of botulinum toxin injections and fascial manipulation technique**
Luca Guarda-Nardini¹, Antonio Stecco, Carla Stecco, Stefano Masiero, Daniela Manfredini
Affiliations + expand
- Randomized Controlled Trial** > PM R. 2016 Dec;8(12):1142-1150.
doi: 10.1016/j.pmrj.2016.04.007. Epub 2016 May 19.
- Randomized Controlled Trial** > Surg Radiol Anat. 2014 Apr;36(3):243-53.
doi: 10.1007/s00276-013-1185-2. Epub 2013 Aug 23.
- Ultrasonography in myofascial neck pain: randomized clinical**
Antonio Stecco¹, Andrea Meneghini, ...
Affiliations + expand
PMID: 23975091 DOI: 10.1007/s00276-013-1185-2. Epub 2013 Aug 23.
- Conservative treatment of carpal tunnel syndrome: comparison between laser therapy and Fascial Manipulation®**
Elisa Pratelli¹, Marco Pintucci², ...
Antonio Petrucciello¹
Affiliations + expand
PMID: 23975091 doi: 10.1016/j.jbmrt.2021.03.024. Epub 2021 Apr 2.
- The influence of fascial manipulation on function, ankle dorsiflexion range of motion and postural sway in individuals with chronic ankle instability**
Neha C Kamani¹, Shruti Poojari², Raja G Prabu³, ...
Affiliations + expand
PMID: 31668142 PMCID: PMC855744 Free PMC article
- Effects of myofascial technique in patients with subacute whiplash associated disorders: a pilot study**
A Picelli¹, G Ledro, A Turrina, C Stecco, V Santilli, N Smania
Affiliations + expand
PMID: 23975091 doi: 10.1177/026993701246001001.
- Fascial Manipulation® for chronic aspecific low back pain: a single blinded randomized controlled trial**
Mirco Branchini¹, Francesca Lopopolo², Ernesto Andreoli³, Ivano Loret⁴, ...
Aurélie M Marchand⁵, Antonio Stecco⁶
Affiliations + expand
PMID: 26834998 PMCID: PMC4706049 DOI: 10.12688/100research.5890.2
- Clinical Trial** > J Bodyw Mov Ther. 2015 Jan;19(1):113-8.
doi: 10.1016/j.jbmt.2014.08.002. Epub 2014 Aug 11.
- Fascial manipulation vs. standard physical therapy practice for low back pain diagnoses: A pragmatic study**
Robert Harper¹, Larry Steinberg², ...
Affiliations + expand
PMID: 26834998 PMCID: PMC4706049 DOI: 10.1016/j.jbmt.2018.10.007.
- Randomized Controlled Trial** > J Man Manip Ther. 2020 Sep;28(4):236-245.
doi: 10.1080/10669817.2019.1683675. Epub 2019 Oct 31.
- Inter and Intra Operator Reliability of Motor and Palpation Evaluation in Fascial Manipulation in individuals with coxarthrosis**
Andrea Cotti¹, Massimiliano Del Corso², Roberto Diana², Luis...
Alessandra Sudanese³, Antonio Stecco⁴, Mirco Bran...
Affiliations + expand
PMID: 31668142 PMCID: PMC855744 Free PMC article
- Sport injury prevention in individuals with chronic ankle instability: Fascial Manipulation® versus control group: A randomized controlled trial**
Giulio Galli¹, Giacomo Lugaresi¹, Antonio Santagata¹, Andrea Ermola², ...
Silvia Marie Marchand³, Antonio Stecco⁴
Affiliations + expand
PMID: 31668142 PMCID: PMC855744 DOI: 10.1016/j.jbmrt.2021.01.001.
- Randomized Controlled Trial** > Eur J Phys Rehabil Med. 2022 Feb;58(1):85-93.
doi: 10.23736/S1973-9087.21.06814-3. Epub 2021 Nov 17.
- Myofascial points treatment with focused extracorporeal shock wave therapy (f-ESWT) for plantar fasciitis: an open label randomized clinical trial**
Lucrezia Tognolo¹, Federico Giordani², Carlo Biz³, Andrea Bernini², Pietro Ruggieri³, ...
Carla Stecco⁴, Anna C Frigo⁵, Stefano Masiero⁶
Affiliations + expand
PMID: 34786906 DOI: 10.23736/S1973-9087.21.06814-3

Take home message



Fascia matter

Searching for sliding tissue is highly reliable

Deep fascia thickness correlates with pain and impairment

Fascial Manipulation treatment improve pain and disability

mirco.branchini@gmail.com