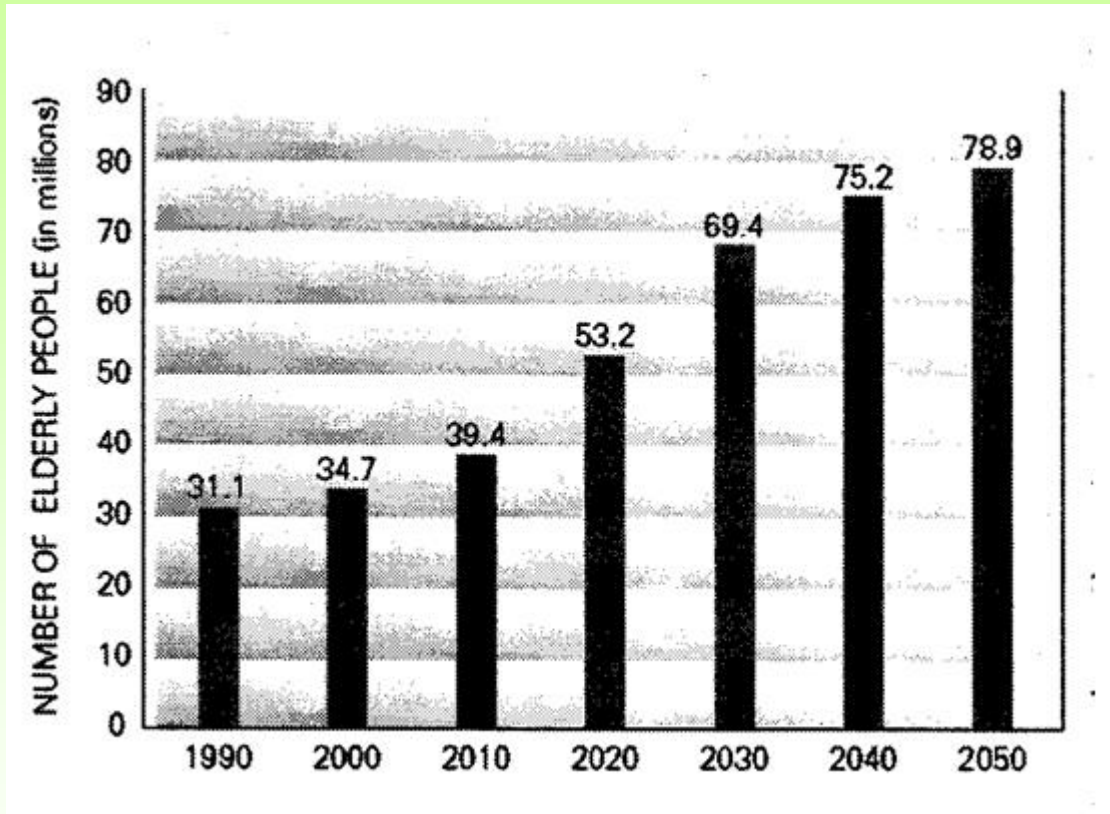


高齡也健康 Happy Aging

梁秉中教授
香港中文大學中醫中藥研究所
臨床研究中心總監



The Senior Boom 背景資料



高齡人士數目 (美國)



Age related changes 生理變化

細胞功能
下降

生長
專責
老化蛋白質

器官功能
下降

血循 ↓
肌肉 ↓
骨質 ↓
荷爾蒙 ↓
免疫能力 ↓



<衰退>

The most disturbing factors to Healthy Aging

引出的問題

Cholesterol deposits
膽固醇

- Arteries 血壓高
- Coronaries 心衰竭
- Brain 中風

Cell changes
細胞惡變

- Cancer 癌

Musculo-skeletal decline
肢體衰退

- 體能下降
- 傷患增加

Neurological decline
神經系統退化

- Dementia
- Neuromuscular co-ordination



<病患>

怎樣預防？

膽固醇

- 飲食
- 西藥
- 補充品（如山楂、丹參、葛根）
- 運動

癌症

- ? 避無可避
 - 介絕致癌物
 - 參考傳統醫學
- 基因
併發- 糖尿、肥胖等
環境污染

肢體衰退

- 鍛鍊 → 效用明顯

神經系統退化

- 多種研究 → 合理假定

相對收效

參透傳統醫學

- 陰陽失衡
- 氣血減弱
- 針對脾虛
胃虛

處理：整體平衡 — 營養
活動
天人合一 — 與時令相配
與人事相配
治未病

營養

- 按需要進食
- 平均飲食
- 注意食譜

中藥三品

上品延命
中品調性
下品療病

Medicine has 3 Levels

Upper Level Maintains Longevity
Middle Level Harmonizes
Lower Level Gives Therapy

Nutritional Items Favoured in Chinese Medicine



人參

Radix Ginseng



黨參

Radix Codonopsis



黃耆

Radix Astragali



山藥

Rhizoma Dioscoreae

山楂

Fructus Crataegi



山柰

Rhizoma Kaempferiae

枸杞子

Fructus Lycii



沙參

Adenophora stricta Miq.

玉竹

Rhizoma Polygonati Odorati



百合

Bulbus Lilii

薏苡仁

Semen Coicis



蓮子

Semen Nelumbinis

黑芝麻

Semen Sesami Nigrum



冬蟲夏草

Cordyceps



Principles of Keeping Harmony with Environment 天人合一

- Internal harmony is taken as essential for the counteracting against filthy environment

“正氣存內，邪不可干”

- Give full respect to seasonal changes

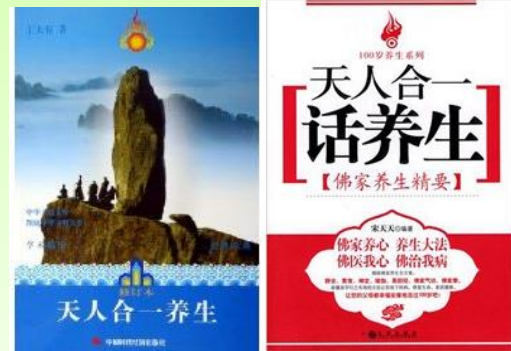
Extreme heat

Extreme cold

} Adjust ADL and Food

起居、飲食調節

- Spiritual Harmony 勿忘精神食糧



Strengthening Defense System

- Treat before ill “治未病”
- Treat and Rehab “治養結合”
- Treat the deficit “補虛為重”

Modern interpretation 現代解讀

- Upgrading immunological Defense 免疫提升
- Downgrading allergic responses 減低刺激



Principles of Balanced Activities 平衡體練

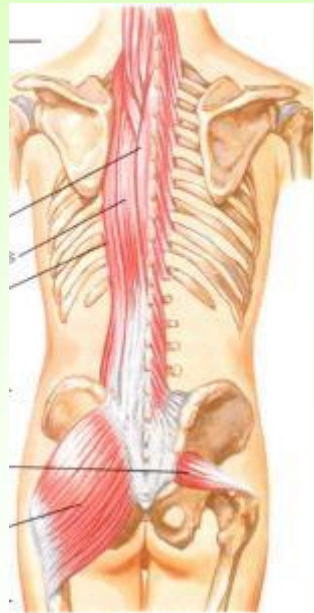


- Exercises are emphasised 按秩序
- Selection according to personal inclination 按個人需要
- Avoid over training 不過份
- Balanced training for all parts 全身關注
- Qi-kung - Harmonising Spirit (調神)
Harmonising Rest (調息)
Harmonising Posture (調形)



Back Pain 關注背痛

- Commonest Musculoskeletal Problem
最普遍、干擾長者健康症候
- Complex nature not only related to Spine
不是單純脊骨問題



Paraspinal muscles 背部肌肉

Ligaments 韌帶

Fascia 筋肌膜

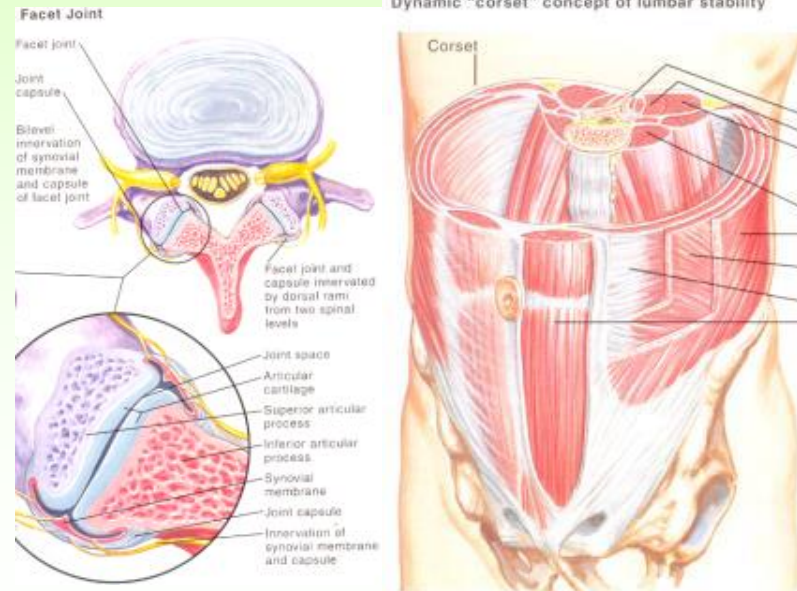
Inflammation 炎症

Congestion 血滯

Pain interpretation 痛感

多向性

還有病理的少數



最新見解

Fascia Research 筋肌膜的重要

Old belief 舊觀念-隔離物

- A spacer 分隔層
- Fascia – no special function 無特殊意義
- Allows placement of connecting tissues 方便放置

Nerves 小神經

Arteries 小血管

Lymphatics 小淋巴



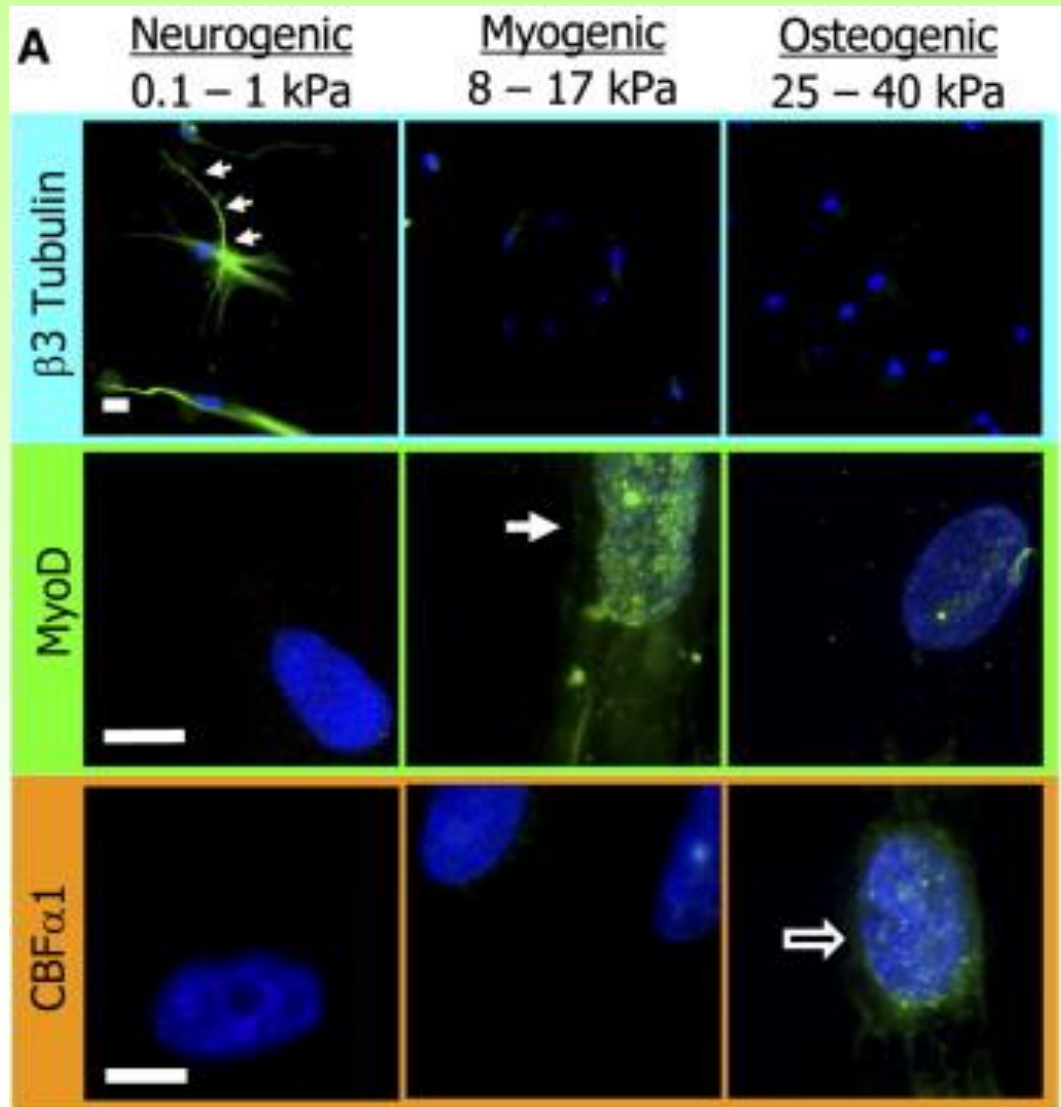
New Concept 新觀念 – 傳遞功能 再生功能

- Interconnecting network
肢體網絡
- Helps force transmission
訊息傳達
- Contains nerves, endings and receptors
受體與資料發放
- Function – Proprioceptive 位置感應
Reparative 修補能力
- Reparative function – Stem Cells
由幹細胞負責



The Fascial stem cells are poly potent

筋膜內的幹細胞



神經屬性

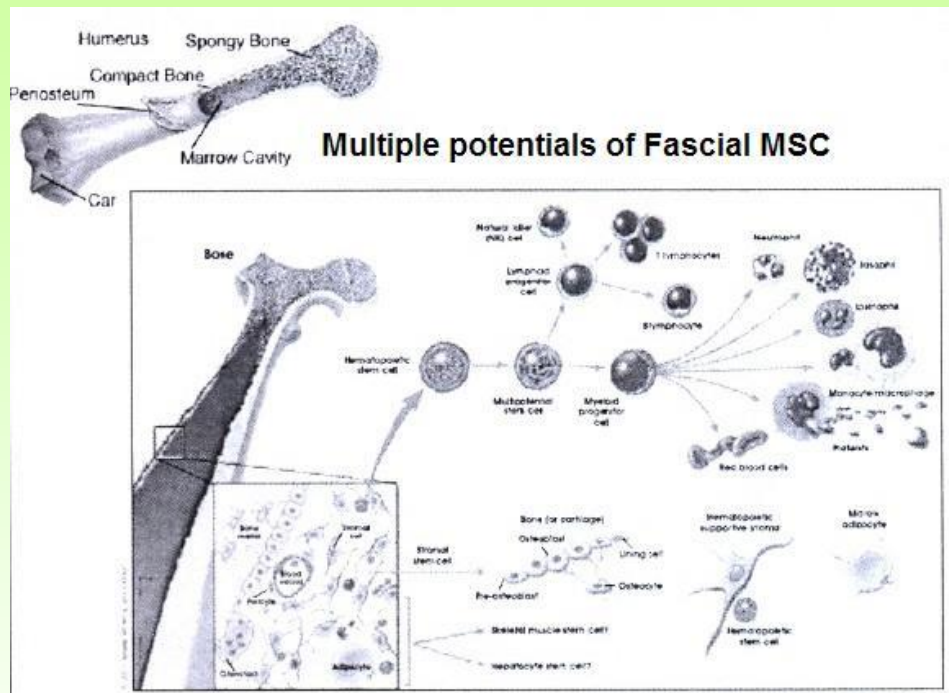
肌肉屬性

骨骼屬性

筋肌幹細胞 — 治療筋肌損傷

筋膜學給肢體傷患提供新的治療概念

運動損傷



草藥摧化：

使用紅花、續斷、三七、大黃

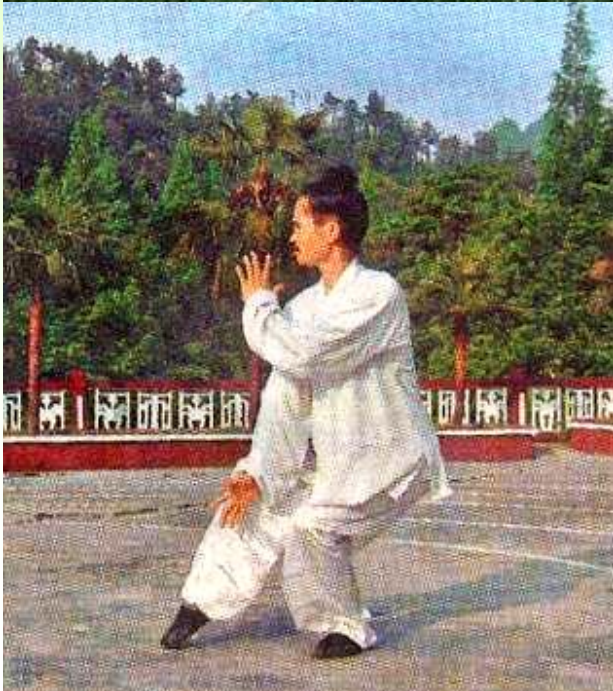
研究經驗已出版

- 使用體內纖維細胞修復筋腱 (J. Orth Res 2008; Calif Tissue Int 2009)
- 骨髓幹細胞對修復筋腱影響 (Chin Med J 2011, Cl. Orth Rel. Res 2006, Tissue Eng 2010)
- 遊走幹細胞對修復筋腱影響 (Chem Eur. J 2009, Cancer Science 2010, Cytotherapy 2011)
- 使用腔架配生長因數/ 幹細胞/ 軟骨細胞，作修補用途 (Biomacromol 2008, Internat Science 2006, 生物醫學 2006, 中國運動醫學雜誌2008)
- 實驗室 - 體外細胞反應 (Am J. Sports Med 2008, Wound Repair & Regen 2008, Cl. Orth 2006)
- -實驗室 - 動物實驗損壞筋肌反應 (Cl. Orth & Rel Res 2006, Clin Biomech 2006, Am J. Sports Med 2006; Am J. Sports Med 2008, Ultrasound in Med 2006, 廣州醫藥, 2006)

The New Fascial Research offers innovative explanation to Self Care



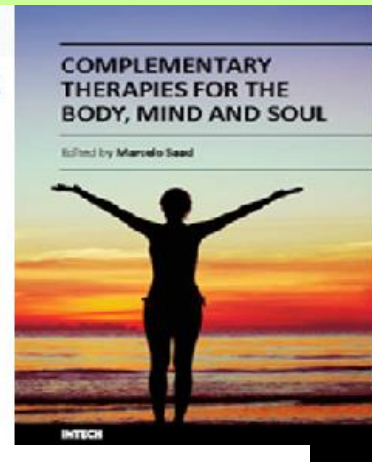
導引—三千多年對刺激筋肌膜：預防炎症、鎮痛、自我治療的指示



Chapter 8 OPEN ACCESS

Yoga & Qigong — A Self-reliant Practice for Health of Body & Mind

Ping-chung Leung^{1,2}



中醫中藥研究所

Institute of Chinese Medicine

Natural Healing in Chinese Medicine: Qi Gong and Tai Chi

The Asian Way of Exercises Yoga & Qigong — for the Health of Body & Mind

研究篇

家庭医学 (12) 2012, 01

练功养生防老的现代解读

□教授 梁秉中 (香港中文大学中医中药研究所)

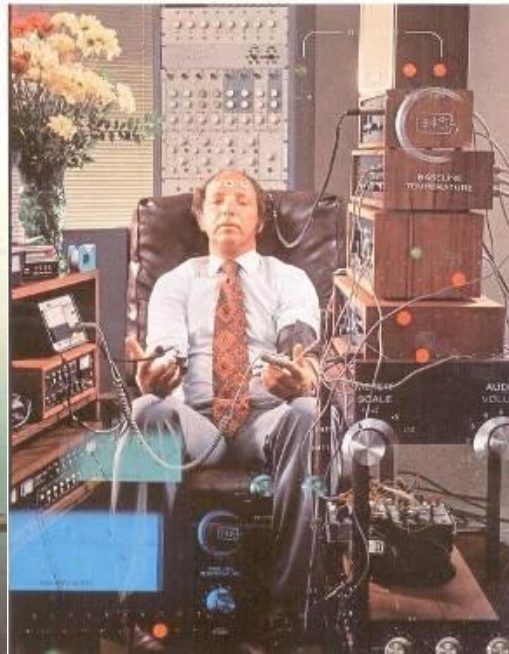
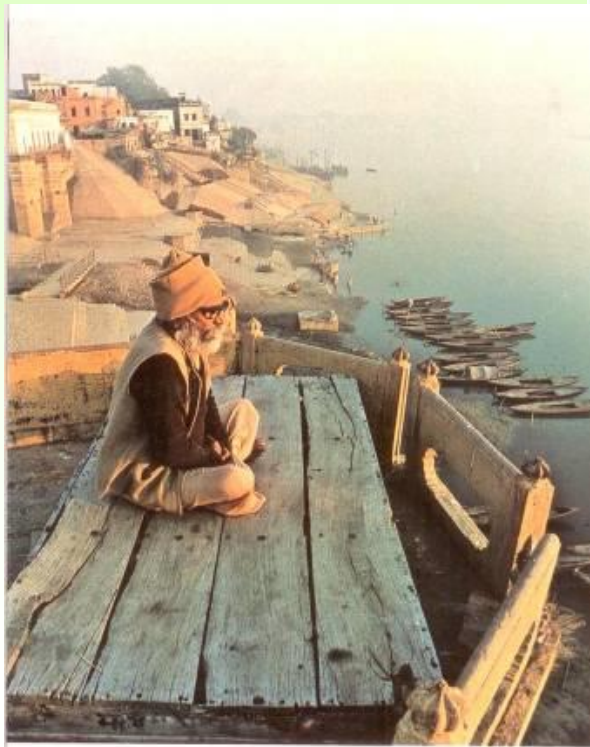
The three essential fundamental activities

肢體衰退 — 防痛、防惡化三妙術

Stretching “拉筋” 導引

Controlled breathing 吐納

Meditation 靜思



Plasticity of the Brain

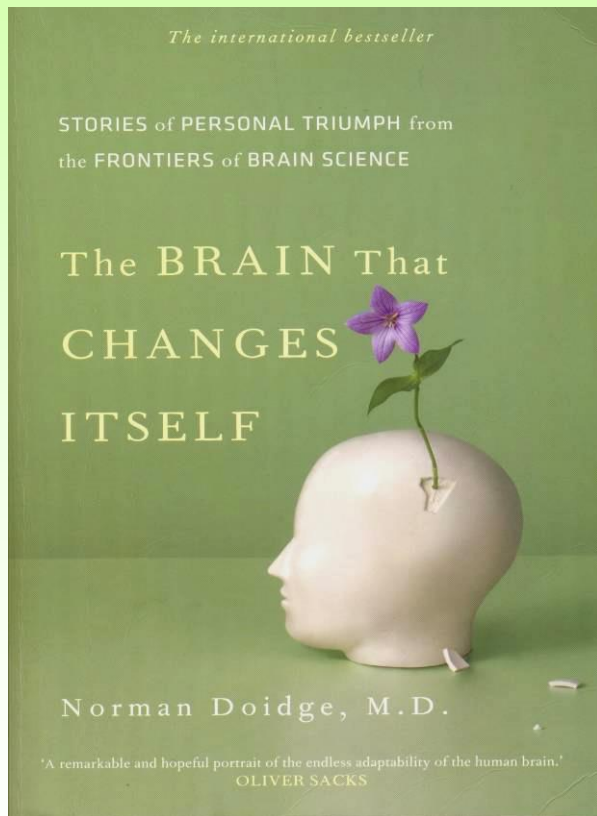
大腦的可塑性

Segmental destruction of the Brain

- Post-stroke Hemiplegia
- Childhood Palsies

could be compensated.

- “Phantom limb” Syndrome
- Basic of “constrained induced therapy”
- 損害部份是否永不恢復？
- 周邊正常細胞能否支援？
- 中風偏癱、小兒腦癱有新發現
- 大腦細胞不會自動修補，但懶閒周邊可以支援
- 先決條件：堅持、執着

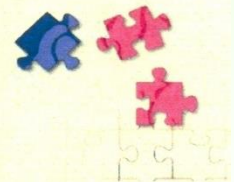


推動活神經細胞補充死去的功能

- People who had stroke suffer from “learned nouse” (no use) 偏癱：故意少用健側
- Monkeys with one deafferented arms move both for survival 猴子實驗：不用健則之後患側恢復
- “Rewiring” proven in monkeys
- “Constrained Induced Therapy” (CI)
- 80% stroke patients improve with CI 腦癱兒可恢復80%
- CI also works for CP children



SAHK Institute of
Rehabilitation Practice



How to effectively implement Constraint Induced Movement Therapy (CIMT) and to maximize its efficacy for hemiplegic cerebral palsy: outcomes & experience sharing

(course code: CA-14B-11)

ORIGINAL ARTICLE

REHABILITATION USING TOPICAL AGENT—MYTH OR REASONABLE OPTION? 传统敷浸与康复治疗 — 神话或现实？

Ping Chung Leung¹, Lihua Peng², Xin Zhao³ and Leung Kim Hung¹

Objective: To investigate whether topical agents of herbal origin used in traditional Chinese medicine (TCM) have real biological effects on limb swelling and tissue healing.

Methods: Formation of an innovative formula was achieved through a literature screening of over 200 herbs. The herbs selected have been reported to be anti-inflammatory, promoting circulation and supporting tissue/bone healing. In vitro and in vivo tests were done to investigate the biological effects of the herbs.

Results: Topical agent for tissue swelling: (a) The herbs were found to facilitate the transport of a chemical through an artificial membrane and porcine skin in a diffusion chamber; (b) the herbal bath was found to positively reduce hand and foot swelling. Topical agent for fracture healing: (a) In vitro tests showed positive anti-inflammatory, circulation promotion and tissue healing effects of a six herbs formula; (b) treated animals showed bigger callus, higher serum bone specific alkaline phosphatase and better mechanical strength; (c) liquid chromatography-mass spectrometry testing showed that there was a real transport of chemical markers across the skin.

Conclusion: TCM herbal agents used topically for hand swelling and tissue healing do have demonstrable scientific basis. Further research is justified.

草藥湯泡浸消腫康復

This practice is common in China



無錫手外科醫院每天例行操作

以傳統與生命科學概念選藥

Selection according to Traditional and Bioactivity Concept

Pain & Heat – Inflammation – Control inflammation

Bruising & Circulatory Stagnation – Tissue damages – Promote circulation (Angiogenesis)

Bone Fracture – Slow Healing – Promote healing

熱毒 – 清熱解毒 (減少熱毒) – 消炎 – 大黃、梔子

血瘀 – 活血化瘀 (增加血循環) – 通血、刺激血管增生 – 三七、紅花

骨瘍 – 舒筋補骨 (支援骨成長) – 補筋補骨 – 續斷

Traditional Concept coincides with Modern understanding of Tissue Healing



藥草組 Herbal Group

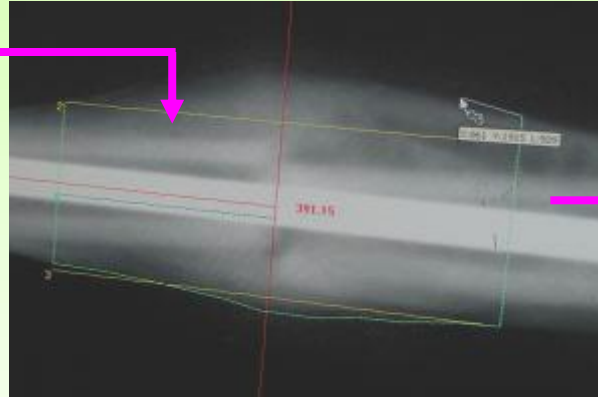
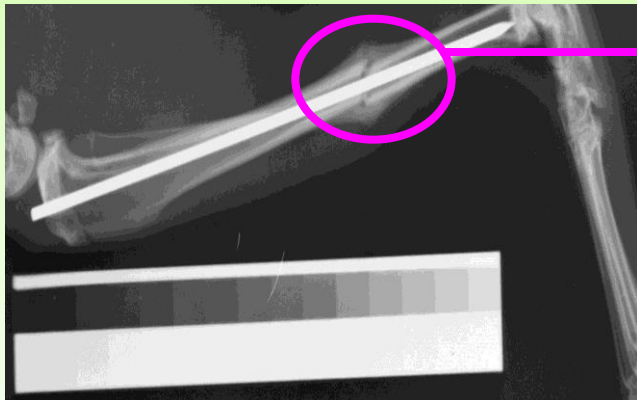
骨痂比較大
Callus Larger (X ray)

力學抵抗比較強

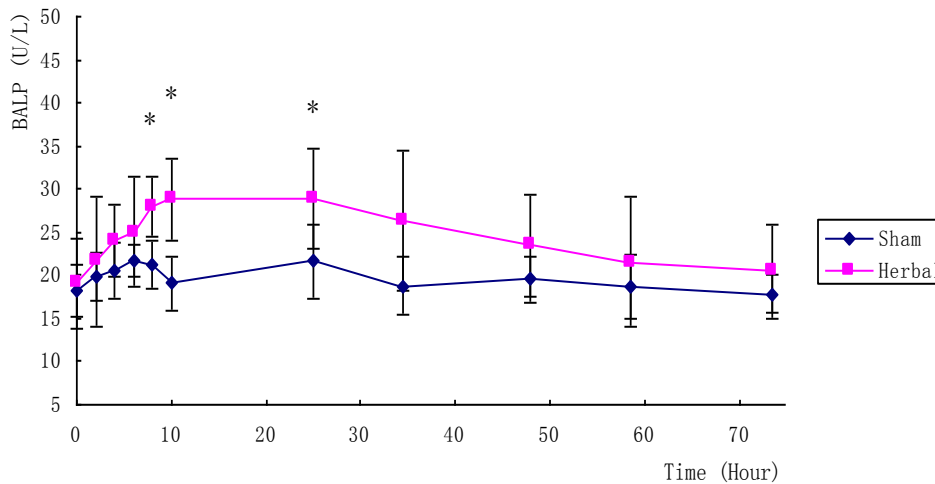
Biomechanically Stronger

BALP比較活躍

Biochemically more active



Callus to be
calculated
for area





Conclusion 高齡要健康

Traditional Practices in Rehabilitation

勿忽視傳統醫學的價值

- Most important Principle – Self-care 自癒的肯定
- Old, classical Practices are gaining modern interpretations 找尋實證、發皇古義
- Old, classical Practices can be put on scientific research platforms 實證後提升至現代實踐
- Rehabilitation needs multiple targets approaches 全面治理與局部治理一樣重要

放諸世界皆準的金科玉律 — 自癒Self-Care