

# Central Nervous System Injury

the rehabilitation of shoulder subluxation

李晓梅  
王立银  
拉巴玉珍



list

01 Introduction

02 Rehabilitation

03 Prevention

# 1.1 Introduction

Refers to the mechanical changes of the glenohumeral joint, shoulder joint humeral head descending from the glenoid cavity, leading to the gap between the acromion and the humeral head which can touch the gap.

# 1.2 Symptom

- Pain
- limitation of activity
- hand-shoulder syndrome
- acromion sunken or touch the gap
- Winged shoulder

# 1.3 Pathogenesis

- decreased muscle strength
- gravity effect
- muscle dysfunction
- improper nursing



# The Rehabilitation of the GHS



2.1

# The exercise therapy of the GHS



01



**Rehabilitation nursing in early stage—Supporting treatment**

**Good limb position**



**The use of the shoulder sling**



02



**PNF technique**



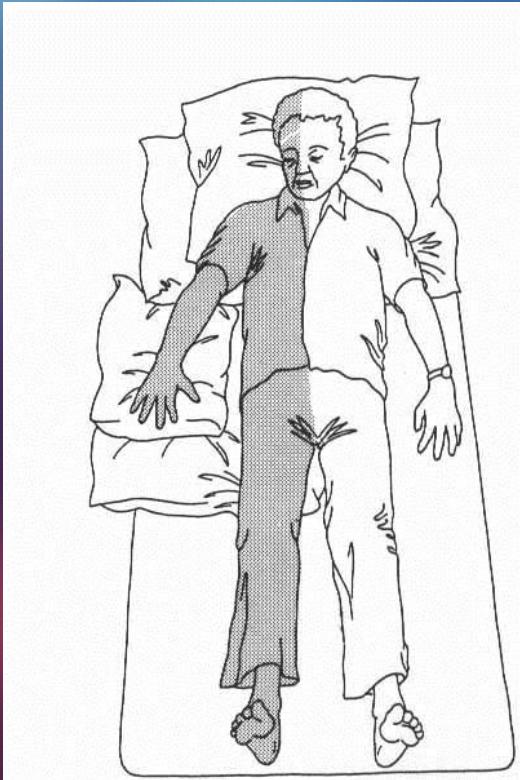
03



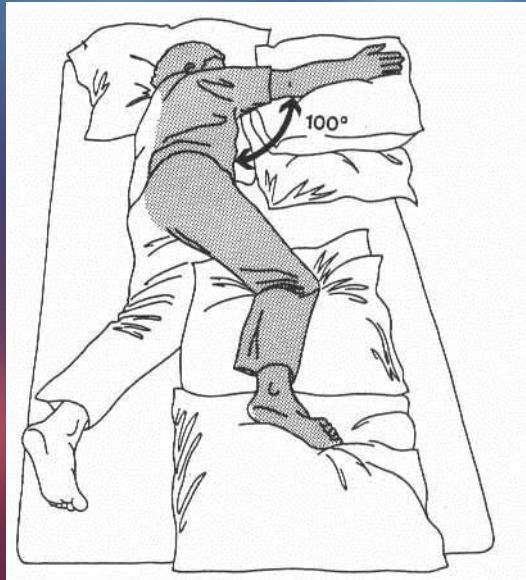
**Bobath technology**



# Supporting treatment—good limb position



Dorsal position



lie with the  
healthy side



lie with the  
affectd side



# Supporting treatment—The use of the shoulder sling



# PNF technique

The scapular elevation  
and forward mode

The scapular depression and  
backward mode

The scapular depression  
and forward mode

The trunk elevation  
pattern

Upper limb D2  
flexor pattern

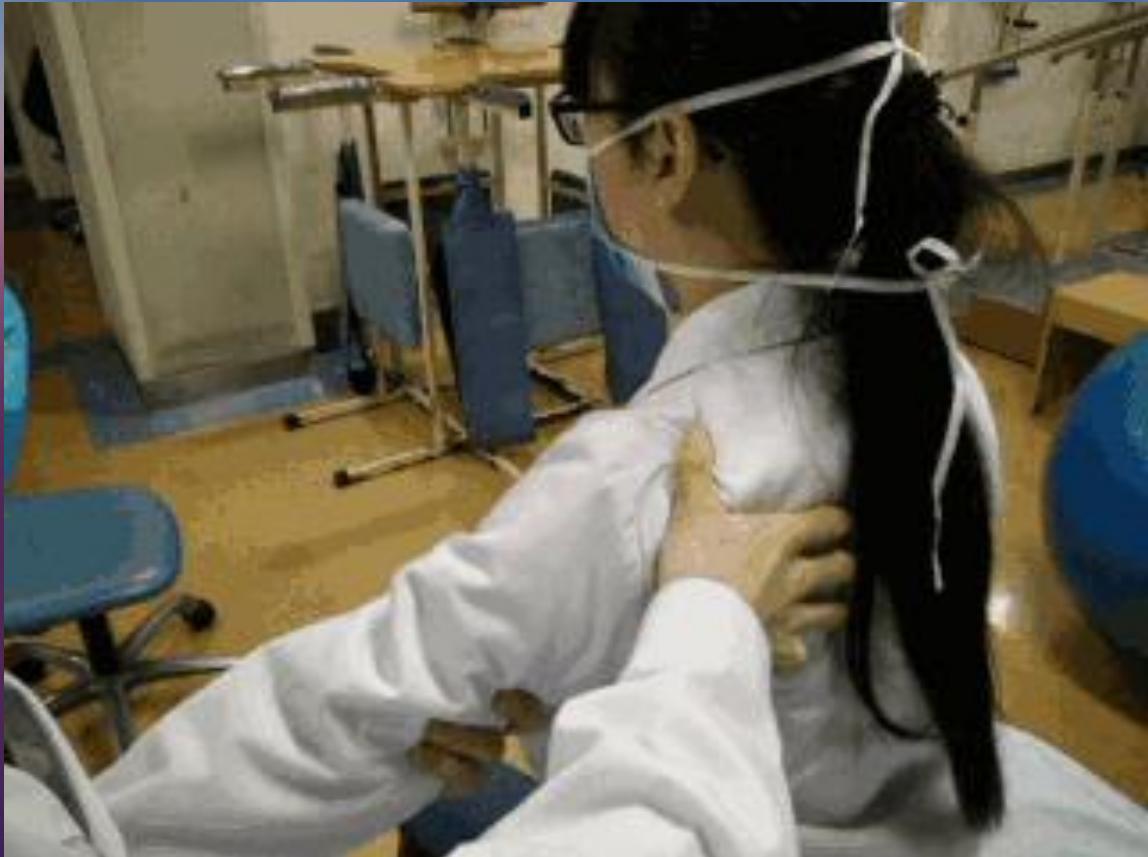
The scapular elevation  
and backward mode





# Bobath technology

**Passive stretching:**



**Active assisted stretching**





# Bobath technology

**Seat active stretching:**



**The stretching of the trunk muscle**



04

Physical agents  
therapy

Medication

Soft tissue taping  
technique

acupuncture





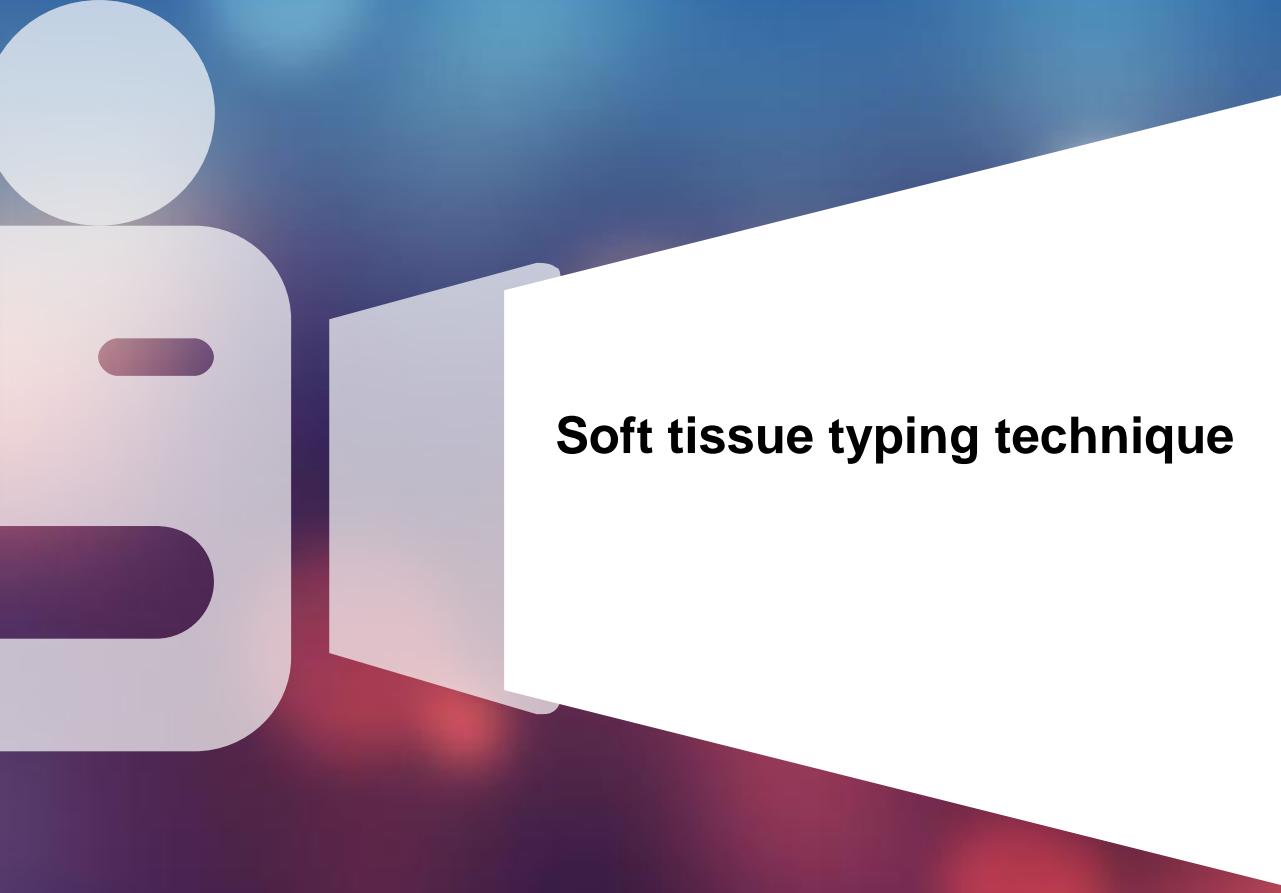
Low frequency  
stimulation



Modulated medium  
frequency electrical  
stimulation

[1]蒋天佑, 王兴林, 马林, 等. 低频电刺激腓总神经时脑部fMRI表现[J]. 中华物理医学与康复杂志, 2003, 25(7): 410—412.

[2]Paci M, Nannetti L, Rinaldi LA. Shoulder subluxation in hemiplegia[J]. Jurnal of Rehabilitation Research and Development, 2005, 42(6): 557—568.



## Soft tissue typing technique

- The patient was sitting, shoulder abduction with elbow flexion 45 degrees, 90 degrees, about scapular level, with "I" shape affixed to promote muscle contraction, leading shoulder lift, external rotation, increasing sensory input

Motor imagery  
therapy

Upper limb loading  
vibration technique

Occupational  
therapy

Rood  
technique



### 3.Prevention

- Patient and family propaganda
- Keep the correct position
- Corrected scapula position
- To guide the active and passive movement
- Shoulder sling



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# references

- [1] Paci M, Nannetti L, Taiti P, et al. Shoulder subluxation after stroke: relationships with pain and motor recovery [J]. *Physiother, Res, Int*, 2007, 12(2): 95–104.
- [2] 周文萍, 阚世锋, 陈文华, 脑卒中后肩关节半脱位的研究进展 [J] *中国康复理论与实践* 2013 年 9 月第 19 卷第 9 期 *Chin J Rehabil Theory Pract*, Sep. 2013, Vol. 19, No. 9)
- [3] 蒋天佑, 王兴林, 马林, 等. 低频电刺激腓总神经时脑部 fMRI 表现 [J]. *中华物理医学与康复杂志*, 2003, 25(7): 410—412.
- [4] Paci M, Nannetti L, Rinaldi LA. Shoulder subluxation in hemiplegia [J]. *Jurnal of Rehabilitation Research and Development*, 2005, 42(6): 557—568.
- [5] 陈文华. 软组织贴扎技术临床应用精要 [M]. 上海: 浦江教育出版社, 2012: 75—76.
- [6] 刘传道, 朱红军, 王海波, 等. Rood 技术联合肌电生物反馈对脑卒中早期肩关节半脱位的作用 [J]. *中国康复医学杂志*, 2011, 26(11): 1071—1073.
- [7] 朱红梅, 卞荣, 王盛. 两种贴扎方法用于治疗脑卒中偏瘫患者肩关节半脱位的疗效观察 **Chinese Journal oJ'Rehabilitation Medicine**, Ju!. 2013, V01. 28, No. 7



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# references

- [8] PNF 技术治疗早期偏瘫后肩关节半脱位的疗效, 杨丹丹, 徐琳峰, 陈丽娜, 杨加亮-Chinese Journal of Rehabilitation , April 2007, Vol .22 No .
- [9] RY E.The Effects o f Co ntract relax a ntag onist-contract form of PNF S trectching o n Ro stur al Stability[ J] . Medicine & science in spo rts & exercise(S0195-9131), 2006 , 38(5):448 -448 .
- [10] 毕研贞,郑志雄,李康增,等. 充气式肩吊带对偏瘫后肩关节半脱位的疗效[J]. 中国康复理论与实践 , 2011, 17(5): 452-453.
- [11] 安巧,李哲,苏慈宁,等. 肩吊带结合康复训练治疗肩关节半脱位的疗效观察[J]. 中国康复医学杂志 , 2010, 25(6): 575-577.
- [12]新型手臂吊带对脑卒中偏瘫患者肩关节半脱位的纠正作用及对转移能力的影响, 王盛,顾昭华,龚晨,罗予,王彤-中华物理医学与康复杂志2016年2月第38卷第2期

