HISTORY OF CRPS type I : ABOUT THE PROGRESS OF PATIENTS’ PHYSICAL MANAGEMENT
A Short Reminder

**Physiopathological updates**

CRPS type I

= Inflammatory system disorders
  + Autonomic Nervous System disorders
    + Peripheric N.S disorders
    + Central N.S disorders

→ Exclusion of the limb
→ Body Perception Disturbance
→ CRPS Chronicization

**Physical therapy Guidelines**

- Contrast Baths, balneotherapy, TENS, Desensitization...
- Hand-off + :
  - PEPT,
  - mirror therapy,
  - GMI,
  - Patient’s Educational Therapy...
PURPOSE OF THE THESIS

Highlighting simultaneously:

- the progress of the **physiotherapeutic management** of patients suffering from CRPS,

- the progress of **pathophysiological knowledge**

from the 16th century to the present time.
METHODS

Data bases :
- PubMed
- ScienceDirect
- Kinédoc
- LISSa
- references from Health Care Professionals

Exclusion :
- Pediatric CRPS
- Specific physiological states (pregnancy, cancer...)
- CRPS type II

Keywords : The most widespread designations
- Causalgia
- Sudeck's Atrophy
- Reflex sympathetic Dystrophy
- Algo(neuro)dystrophie

→ 62 articles, written from 1552 to 2018 included.
RESULTS

16th cent. : A. Paré and the CRPS discovering (1,2)

→ CRPS or gangrene ?

18th cent. : Hunter (2,3)

→ Post-traumatic Muscles spasms and joint stiffness
   Edema and Persistent pain

→ Improvement with active solicitation of the painful limb

(1) Paré A. La maniere de traicter les playes [...] instrumentz necessaires pour leur curation. Paris : Arnoul l'Angelié ; 1552, 196.
(3) Hunter J. A Treatise on the Blood, Inflammation, and Gun-shot Wounds. Haswell, Barrington, and Haswell; 1840, 611
RESULTS

19th cent. : Causalgia (Mitchell, 1864) (2,4,5)

Referred pain due to a « mind misunderstanding »
= somato-sensory cortical reorganization ?

→ Sensory stimulation techniques : leeches, massages, vesication
→ /!\ : « causalgia » = CRPS type II

Early 20th cent. : Sudeck’s atrophy (2,5)

→ Excessive Inflammatory reaction : Physical therapy less recommended
→ Sudeck : active exercise programs with slight pain accepted

18th cent. : Hunter (2,3)
→ Improvement with active solicitation of the painful limb

RESULTS

20th cent. : Reflex Sympathetic Dystrophy (2)

Inflammatory Syndrome vs sympathetic hyperactivity
Expansion of Physical Therapy
→ Stress Loading Program (7)

21st cent. : Body Perception Disturbance and Hand-off + (2,8)

→ NO adaptation strategies !
→ Patient’s therapeutic Education : education about pain « coping »
→ PEPT (9,10)

18th cent. : Hunter (2,3)
→ Improvement with active solicitation of the painful limb

Early 20th cent. : Sudeck’s atrophy (2,5)
→ active exercise programs with slight pain accepted

DISCUSSION

21st cent. Techniques : Historical legitimacy

→ Long-term care
→ to avoid CRPS chronicization

+ symptomatic (even empirical) techniques

→ short-term care
→ to complete the session

→ improve the patient’s compliance and trust
DISCUSSION

Rational use of denominations for an optimal care practice

Searching with incorrect denomination → unsufficiently updated literature

- Complex Regional Pain Syndrome
- Sudeck's Atrophy
- Algodystrophy
- Algoneurodystrophy
- Causalgia
- Post-traumatic chronic pain
- Reflex Sympathetic Dystrophy
- Painful Post-traumatic Osteoporosis

C. PLASSE - 2019