### Sabre fencing, an unexpected weapon to foster rehabilitation following breast cancer

An original way to fight the disabilities induced by the treatments



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#### Benefits of sport after breast cancer

- Medical and physiological benefit
  - Improved survival
  - Reduction of risk of recurrence
  - Biological and physiological factors
    - anti cancer factors
    - **y** pro cancer factors
- Psychosocial benefit
  - Sociability
  - Better quality of life
  - Improved self-esteem



#### 2025: in France one woman in eight will present with breast cancer

### Sport and physical activity are part of non-drug therapy in breast cancer

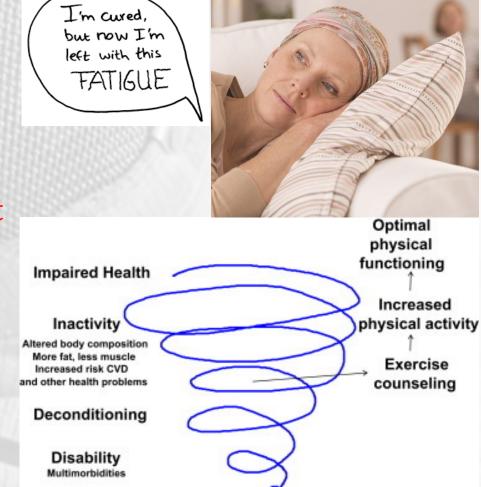


A strong message: MOVE



#### Adverse effects of cancer on physical condition

- Fatigue
  - 80% of patients
  - Physical, emotional, cognitive
  - Inefficiency of rest or antidepressants
  - Can last several months or years
  - Physical activity is the only effective treatment
- Physical deconditioning
  - Impaired cardiovascular capacity
  - Impaired muscle ability
  - Physical activity can counteract the spiral





Posture anomalies (back pain)

Breast protection attitude with shoulder roll

Impaired shoulder mobility

➤ Simple tasks of daily life become difficult



# Adverse effects of breast cancer chemotherapies

- Peripheral sensitive neuropathy
  - Balance disorders
  - Impaired fine hand gesture
- Coordination disorder
- Concentration and memory capacity defect
- Loss of muscle strength
- Muscle and joint pains



## Adverse effects of breast cancer on mind

- Anger, revolt
- Depression
- Perturbed sleep
- Anxiety
- Loss of motivation to fight
- Low self-esteem
- Low self-image



Careful adaptation of our olympic sport: Fencing

- Choice of the weapon:
  - Sabre: easy, light
- Choice of gestures:
  - High parry
  - Practice on the impaired side
  - Hand and fingers work
- Choice of lesson sequences:
  - Personalisation
  - General muscle strengthening
- Choice of fencing devoid of hits during the first months
- Choice of « no charge» during the first year of treatment









Fencing: both elegant and recreational

Pleasure and entertainment foster regular attendance
The fighting spirit is cultivated
The elegance of our sport improves self image and self esteem
The same silhouette for everyone with the chest protector



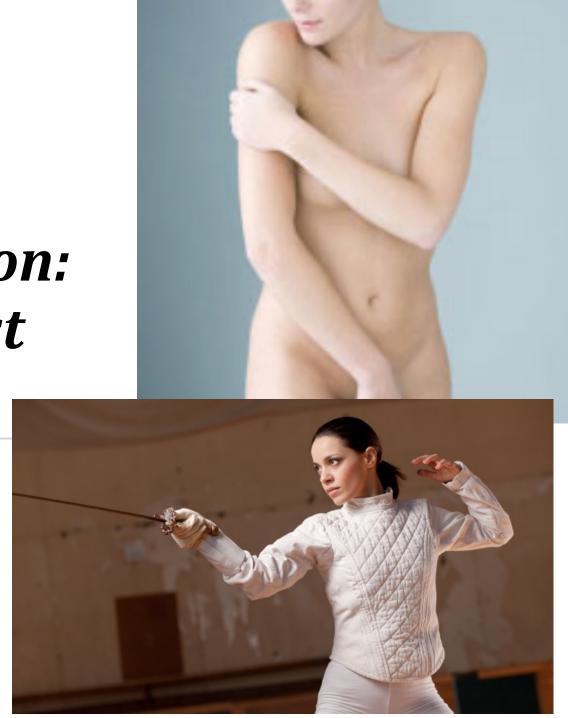




### A controlled laterality

- Fencing is usually practised on the impaired side
- Both sides are trained during muscular stengthening
- Some choose to pratise on both sides alternately

Shoulder opening through the « en garde » position: a response to breast protection attitude



## Quinte parry: a specific gesture which improves shoulder mobility

- Sabre uses high parry
- Parry is a reflexive movement





#### Hand and finger work to improve fine hand gesture

- A fencing weapon is to be held in your hand like a bird, firmly yet without hearting it (Lafaugère, fencing master 18th century)
- Velocity in fencing requires fine finger work





#### Against other side effects of treatments

- Balance disorder
  - Advance
  - Step and lunge
  - Retreat

Concentration and Memory problems

- Composed attacks
- Parries
- Riposte
- Artistic fencing



# Social and psychological benefits

- Venting out the feeling of revolt
- Regaining the desire to fight and win
- Less depression and anxiety
- fighting loneliness
- Meeting friends with the same experience
- Reinvesting in elegance and selfesteem



#### Breast cancer is a real attack

With fencing, the answer is Parrying, Riposting and Vanquishing







#### Solution R.I.P.O.S.T.E.

- A non-profit association coordinating fencing after cancer, specially after breast cancer all over France
- Created in 2014
- Presided over by a fencer, anesthesiologist and sport doctor, D. Hornus-Dragne
- Affiliated with the French Fencing Federation
- Supported by the French sport ministry
- With a scientific committee presided over by a fencer and sport medicine professor, M. Poussel
- The aims:
  - Training of fencing masters
  - Scientific studies (medical, physiotherapy, sport theses....)
  - Defining good practices
  - Monitoring the safety and efficiency of the practice
  - Issuing guidelines
  - Giving agreements
  - Promoting fencing as a health benefit specially after cancer





#### Solution R.I.P.O.S.T.E.

- Referent professionals:
  - Sport doctors, surgeons, oncologists, physiotherapists, psychologists and fencing masters involved in cancer treatments and supportive care after breast cancer
- Training:
  - Theoretical teaching with doctors and caregivers
  - Practical teaching with referent fencing masters
  - · Practical workshops with ladies who have been affected





#### Our team



Dr J. Farnarier surgeon

Pr D. Rivière sport doctor

Pr M. Poussel sport doctor

G. Champain fencing master J-P Parade fencing master



Dr D. Kannoun oncologist

Dr C. Cibeer lymphologist



M. Mercier des Rochettes Psychologist



E. Benays Physiotherapist



Dr D. Hornus-Dragne Medial chief FFE

### Merci pour votre attention





