

Prehabilitation

Going through the therapy



MARCO HASSLER

DER SONNBERGHOF

CLINIC FOR ONCOLOGICAL REHABILITATION

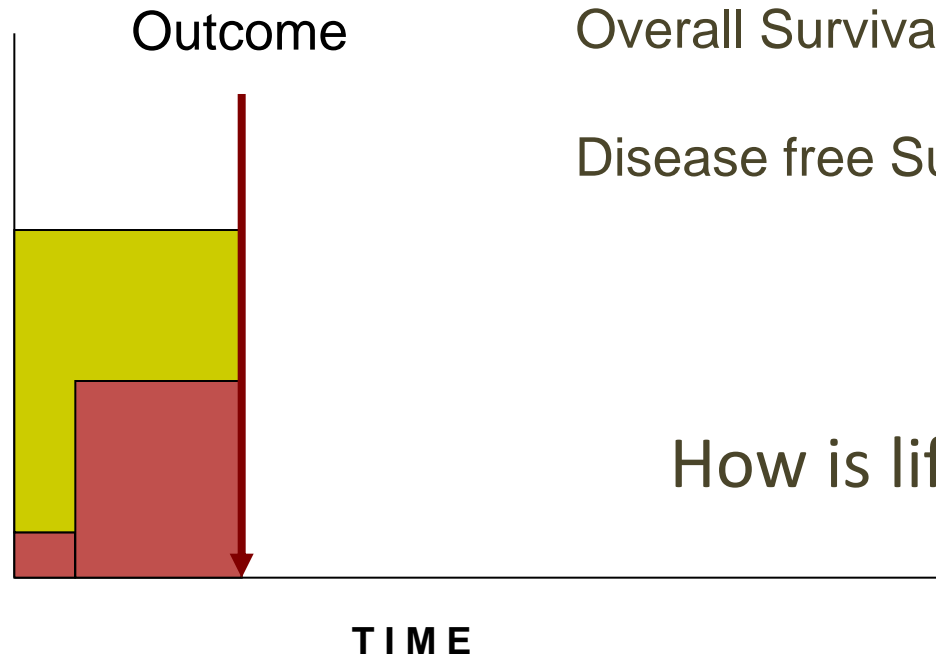
BAD SAUERBRUNN

Course of disease/treatment

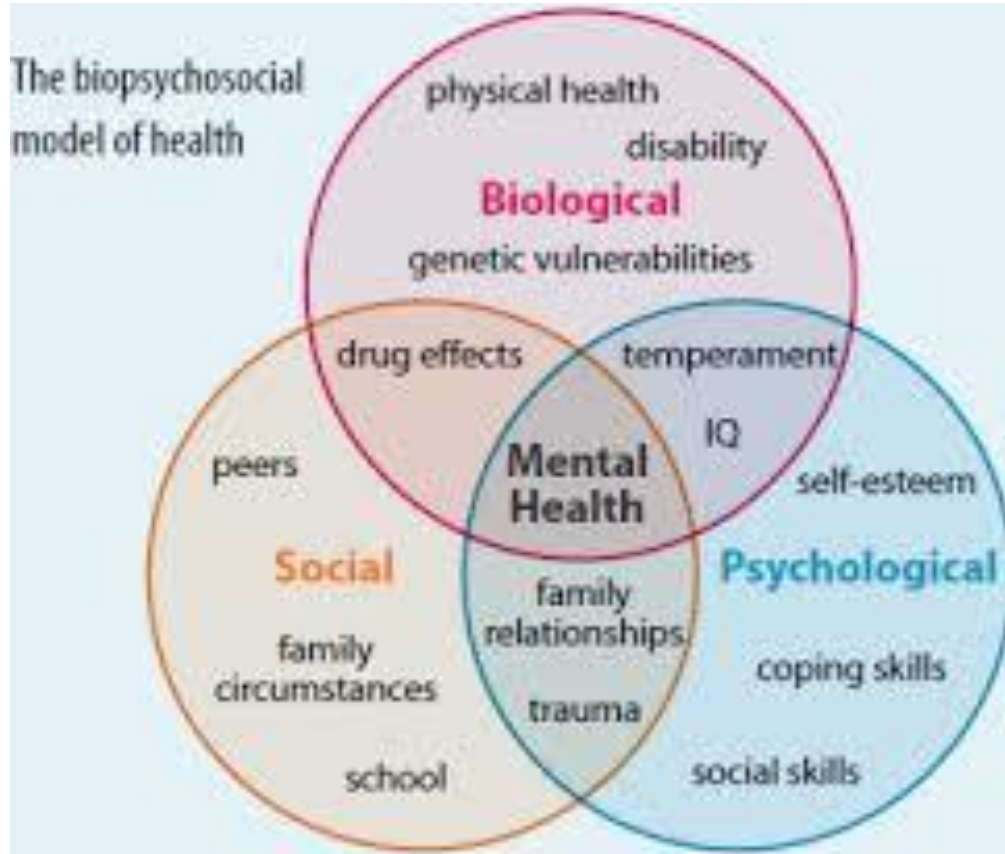


Oncological Patient

INTENSITY OF SYMPTOMS
AND OF THERAPY



Model of Disease



Symptoms



50% of patients in adjuvant Situation live with pain!

Symptoms



Physical, cognitive and emotional symptoms are limiting activity and participation in everyday life

Reduced physical capacity:

25 % of Survivors - 10% of healthy population

Reduced mental Health

10,1 % of Survivors - 5,9%

Physical limitation is the main cause for emotional distress
(not PTSD, fear, depression)

Side effects - symptoms



Bone marrow function

Nausea/Emesis

Polyneuropathy

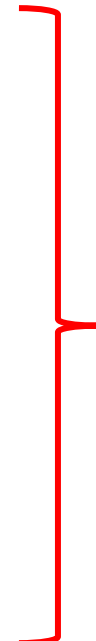
physical function

Sexuality

Cognitive Impairment

Motivation

Fatigue



Prevalence



Most common symptom - 40 – 100%

40% at time of diagnose

80 – 90% during treatment

22% with persistend Fatigue, CTC G3 1a after therapy

25%-33% with persistend Fatigue 10a after diagnosis

Sequelae



limited everyday life

lose of control, social Isolation, emotional Problems

even relatives/supporters show reduced QoL

negative effects for work, social surroundings, mood

Shorter PFS, shorter Survival



- Necessary to reduce working hours

- Income

- New Zealand, Ireland, Canada:
- Decrease between 30 and 37%

Bennett 2009; Sharp, 2010; Lauzier, 2008

- Probability of unemployment + 37%

Macioch, 2011, Mehnert, 2011, de Boer, 2009,
Verdonck de Leeuw, 2010



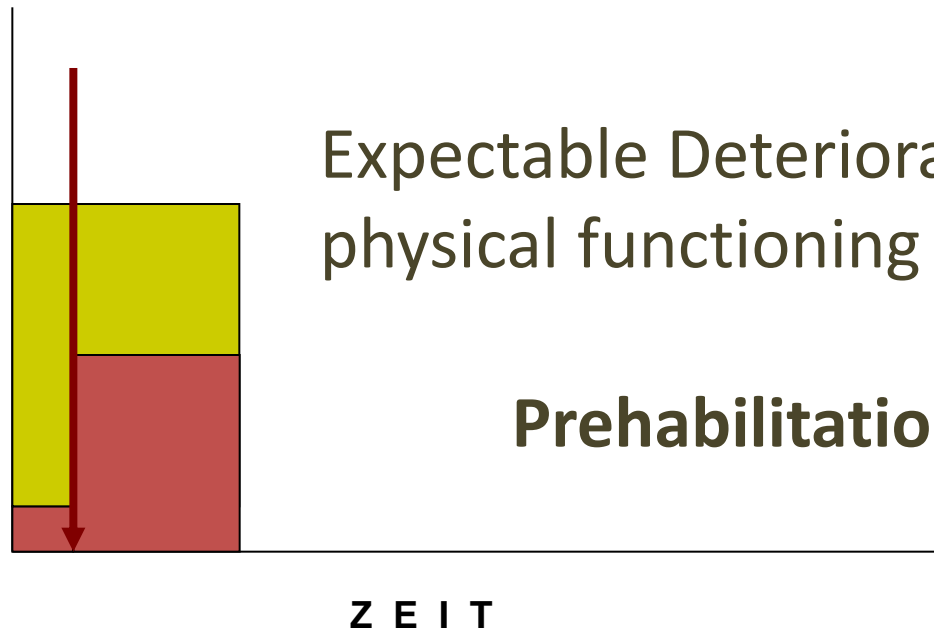
49 - 88 % of Survivors report financial Problems

Study: more stressing then physical or psychical symptoms
($p < 0,0001$)

Course of treatment



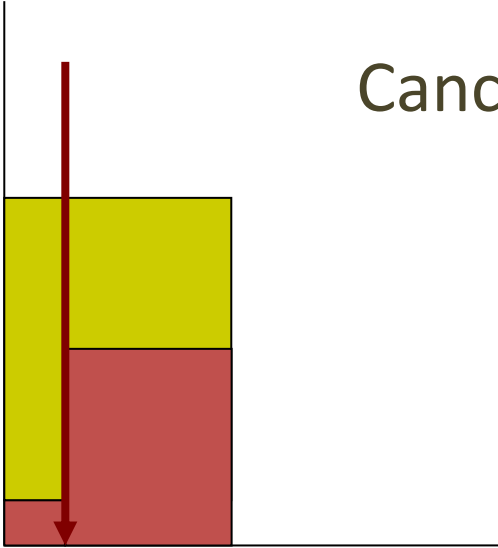
INTENSITY OF SYMPTOMS
AND OF THERAPY



Prehabilitation



Cancer therapy is like running a marathon!



I would not run a marathon without training!

F. Baumann, Köln



Activity during treatment

- Is safe
- Effective
- sides effects
- Fatigue
- Quality of life



Moderate Endurance training

Pro-inflammatory cytokines ($\text{TNF}\alpha$)



Anti-inflammatory cytokines (IL-10, IL-1ra)



Intensive Resistance training

Pro-inflammatory cytokines ($\text{TNF}\alpha$)



Anabolic effect (IGF-1, mTOR)



Prehabilitation



before Chemotherapie:
70%

after therapy:
2%

Prehabilitation



© Fiona Streckmann, Köln

Prehabilitation



Before Chemotherapie:
70%

After therapy:
2%

With
Sensomotorical training:

after Chemo:
100 %



Study Group: 2x/w for 4w, then quarterly

Aim: Fat reduction (- 15% caloric intake)

Protocol: Selfmonitoring (Erkennen Fettgehalt)

Goal Setting

Social support

Prevention of relapse

Result: - 6p

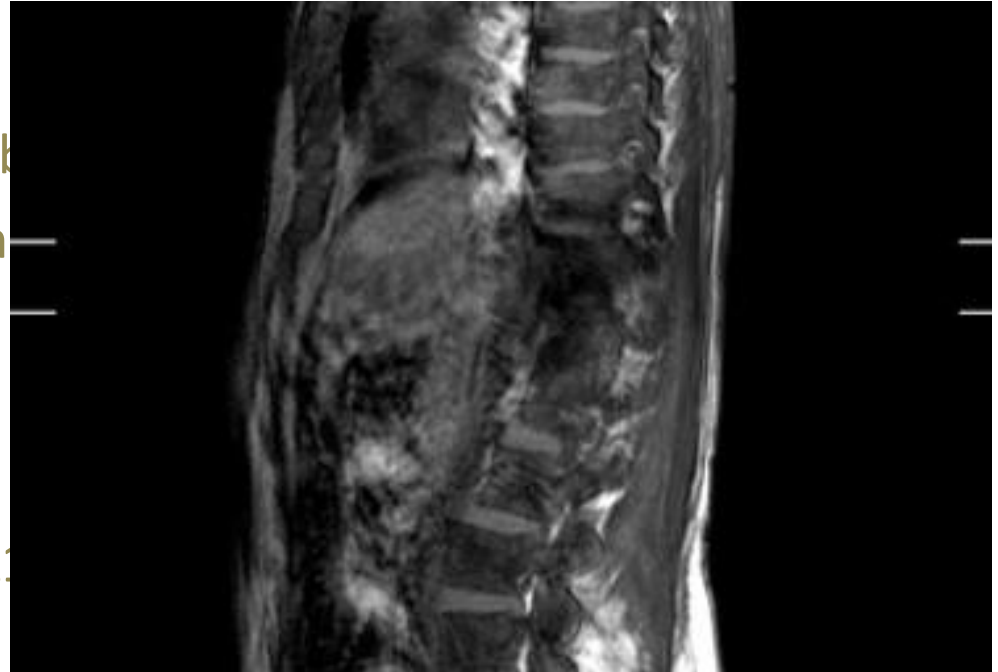
Recurrence rate: -24% in study group

Chlebowski RT et al. 2006: *Dietary fat reduction and breast cancer outcomes; J Natl Cancer Inst* 98(24):1767-76.

Metastasized setting



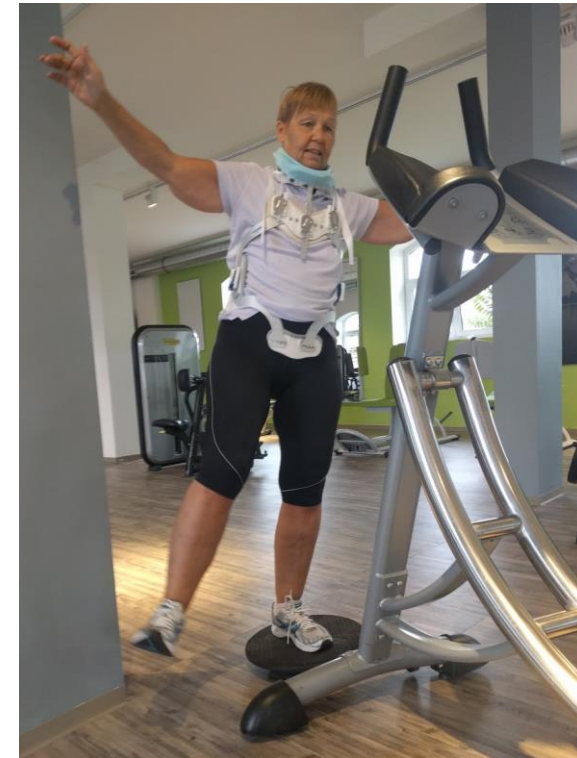
S
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After Rehabilitation



- More security in ADL's
- Found a gym and continued training
- Wanted to buy a bicycle – we doubted



After Rehabilitation



- Thanks to Mrs H!

Recommendations



3 x/w 60 min (or 5 – 6 /30 min) –

18 – 25 MET (metabolic equivalent tasks)

1 MET: resting

1h Swimming 8 METs

Jogging 7 MET

Working in the Garden 5 METs

Walking 4 METs

Easyly

moderate

exhausting

Speaking possible

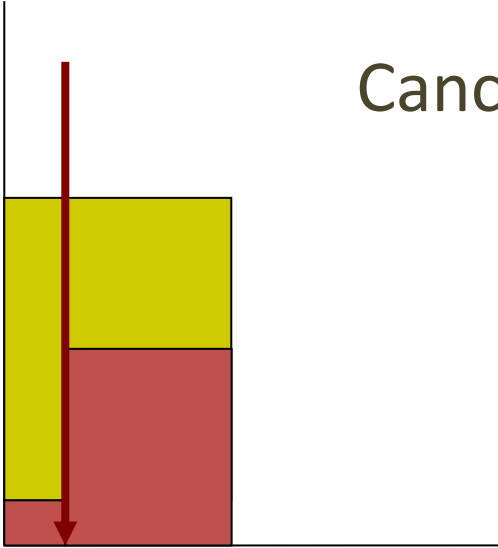
wheezing necessary

not possible

Prehabilitation



Cancer therapy is like running a marathon!



Motivate your patients!

Thank You For Listening!



And To My
Team

