

Cancer Related Fatigue: Oft unerkannt und unterschätzt!

A. Kiss

Basel

22.03.17

Ihr letzter Patient mit CRF

- Wer ?
- Seine/Ihre Beschwerden?
- Ihre diagnostischen Kriterien?
- Ihre Antwort auf die Frage: Was ist die Ursache von CRF?
- Ihre Einschätzung der Einschränkungen durch CRF?
- Ihre Einschätzung der Arbeitsfähigkeit?
- Ihre Antwort auf die Frage : Was tun?
- Ihre Antwort auf die Frage: Wann wird das besser?

Aus der Zuweisung: „Der Patient leidet an einem Hodgkin-Lymphom, welches nach Chemotherapie und Radiotherapie nun seit bald 4 Jahren in einer kompletten Remission ist.

Der Patient leidet aber an einer schweren kognitiven und motorischen Fatigue, sowie an leichten bis mittelschweren neuropsychologischen Störungen (s. Abklärung Memory Clinic).“

Aus meinem Bericht: „Im Zentrum des Leidens des Patienten steht eine deutlich reduzierte Leistungsfähigkeit, die sowohl die körperliche als auch die kognitive Leistungsfähigkeit umfasst. Der Patient schildert, dass er im Vergleich zu seiner früheren Leistungsfähigkeit massiv reduziert ist. Nach 2-3 Stunden normaler Berufstätigkeit, aber auch Alltagstätigkeiten wie Versorgen der Kinder kann er eine weitere Aktivität nicht mehr fortführen und ist gezwungen sich auszuruhen.“

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden?

Ihre diagnostischen Kriterien?

Ihre Antwort auf die Frage: Was ist die Ursache von CRF?

Ihre Einschätzung der Einschränkungen durch CRF?

Ihre Einschätzung der Arbeitsfähigkeit?

Ihre Antwort auf die Frage : Was tun?

Ihre Antwort auf die Frage: Wann wird das besser?

Definition of Cancer-Related Fatigue

- **Cancer-related fatigue is a distressing persistent, subjective sense of physical, emotional and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity and interferes with usual functioning**

Cancer-related fatigue is one of the most common complaints among cancer patients and survivors.

- Typically occurs during treatment or in the first year after
- Can last for long periods of time and doesn't go away after sleep or rest.



Diagnostisches Interview für tumorassoziierte Fatigue (DICRFS)

-(nach Cella et al. 1998, **übersetzt** in Anlehnung an Yeh et al. 2011, mit freundlicher Genehmigung von BMC Cancer)

[Anmerkungen: Anweisungen für den Interviewer in Kursivschrift; Antwortvorgaben vorlesen]

1. Gab es innerhalb der letzten 4 Wochen eine mindestens 2-wöchige Phase, in denen Sie täglich oder fast täglich deutliche Müdigkeit, Energiemangel oder ein verstärktes Ruhebedürfnis verspürt haben?

(Ja) (Nein)

Interview beenden ←

[Fragen 2–11 für die schlechtesten 2 Wochen innerhalb des letzten Monats beantworten lassen. Gefragt wird, ob die Symptome jeden Tag oder fast jeden Tag (bzw. Nacht bei Symptom 5) aufgetreten sind.]

- | | | |
|---|------|--------|
| 2. Haben Sie sich allgemein schwach gefühlt oder hatten Sie schwere Glieder? | (Ja) | (Nein) |
| 3. Hatten Sie Schwierigkeiten, sich zu konzentrieren oder aufmerksam zu sein? | (Ja) | (Nein) |
| 4. Haben Sie das Interesse an Alltagsaktivitäten verloren? | (Ja) | (Nein) |
| 5. Wie war Ihr Schlaf? Hatten Sie Probleme einzuschlafen, durchzuschlafen oder sind Sie zu früh aufgewacht? Oder hatten Sie das Gefühl, mehr zu schlafen als es für Sie normal ist? | (Ja) | (Nein) |
| 6. Hatten Sie den Eindruck, sich durch Schlafen oder Ausruhen nicht richtig erholen zu können? | (Ja) | (Nein) |
| 7. Mussten Sie sich sehr dazu überwinden, etwas zu tun? | (Ja) | (Nein) |
| 8. Haben Sie sich wegen der Müdigkeit traurig, frustriert oder irritiert gefühlt? | (Ja) | (Nein) |
| 9. Hatten Sie wegen der Müdigkeit Schwierigkeiten, begonnene Tätigkeiten zu Ende zu bringen? | (Ja) | (Nein) |
| 10. Hatten Sie Schwierigkeiten, sich an Dinge zu erinnern? Beispielsweise wo Ihre Schlüssel sind oder was jemand vor Kurzem zu Ihnen gesagt hat? | (Ja) | (Nein) |
| 11. Haben Sie sich einige Stunden lang krank oder unwohl gefühlt, nachdem Sie etwas Anstrengendes getan haben? | (Ja) | (Nein) |

[Weniger als 6 Fragen inkl. Frage 1 mit "Ja" markiert: Interview beenden, Patient erfüllt nicht die Kriterien der tumorassoziierten Fatigue].

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden?

Ihre diagnostischen Kriterien?

Ihre Antwort auf die Frage: Was ist die Ursache von CRF?

Ihre Einschätzung der Einschränkungen durch CRF?

Ihre Einschätzung der Arbeitsfähigkeit?

Ihre Antwort auf die Frage : Was kann ich machen?

Ihre Antwort auf die Frage: Wann wird das besser?

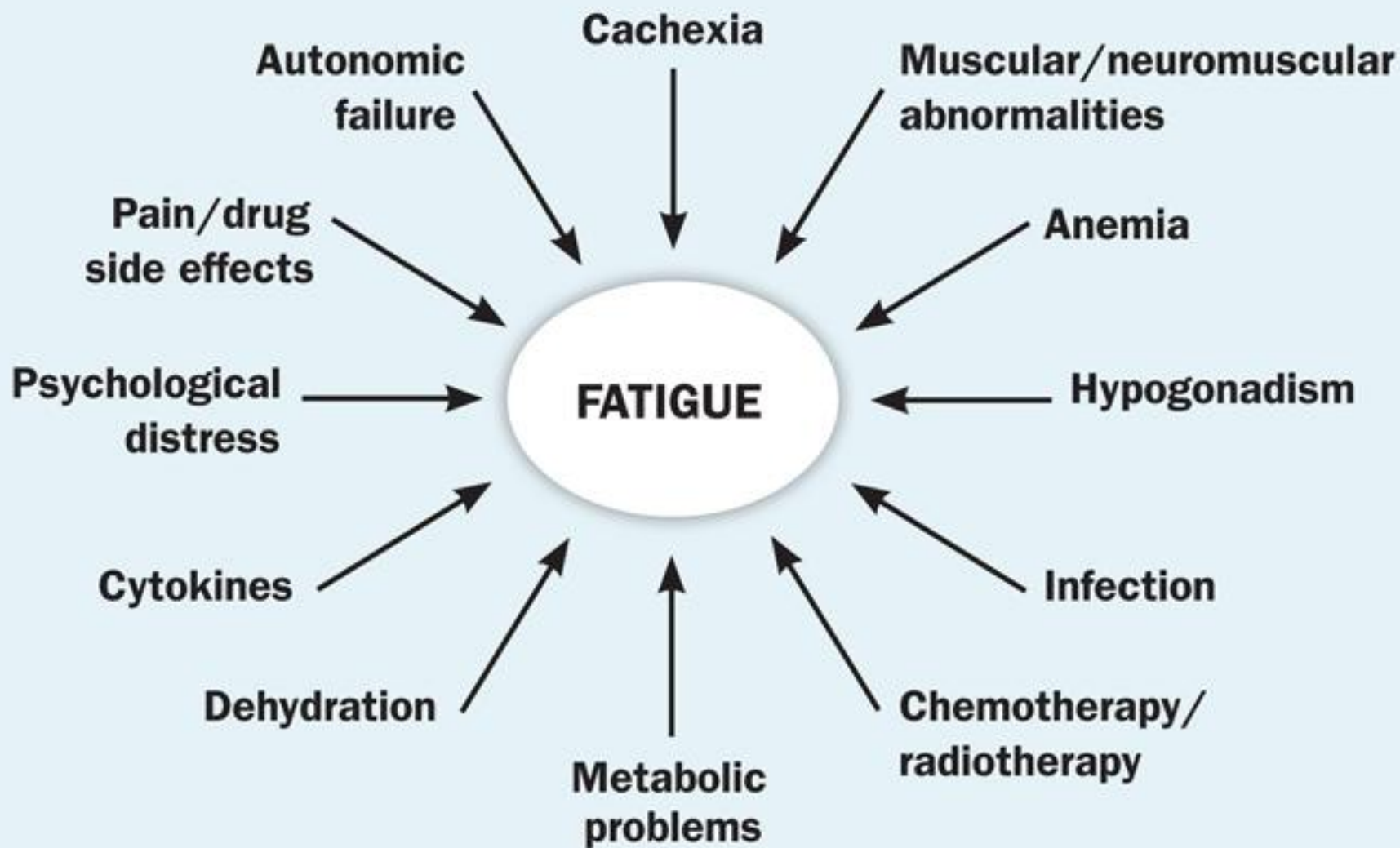


FIGURE 1: Contributors to fatigue in cancer patients.

Cancer-related fatigue in patients with and survivors of Hodgkin's lymphoma: a longitudinal study of the German Hodgkin Study Group

Stefanie Kreissl, Horst Mueller, Helen Goergen, Axel Mayer, Corinne Brillant, Karolin Behringer, Teresa Veronika Halbsguth, Felicitas Hitz,

- Longitudinal study: Fatigue up to 5 years after treatment in first-line clinical trials for early-stage favourable (HD13 trial), early-stage unfavourable (HD14 trial), and advanced-stage (HD15 trial) Hodgkin's lymphoma. (n=5306)
- To assess any effect of patient, disease or treatment characteristics on persistent fatigue.
- High incidence of severe acute and persistent fatigue in Hodgkin's lymphoma survivors
- **Disease stage and treatment are not predictors of persistent fatigue.**

3/24/2017

Lancet Oncol 2016

Published Online

September 6, 2016

[http://dx.doi.org/10.1016/](http://dx.doi.org/10.1016/S1470-2045(16)30093-6)

[S1470-2045\(16\)30093-6](http://dx.doi.org/10.1016/S1470-2045(16)30093-6)

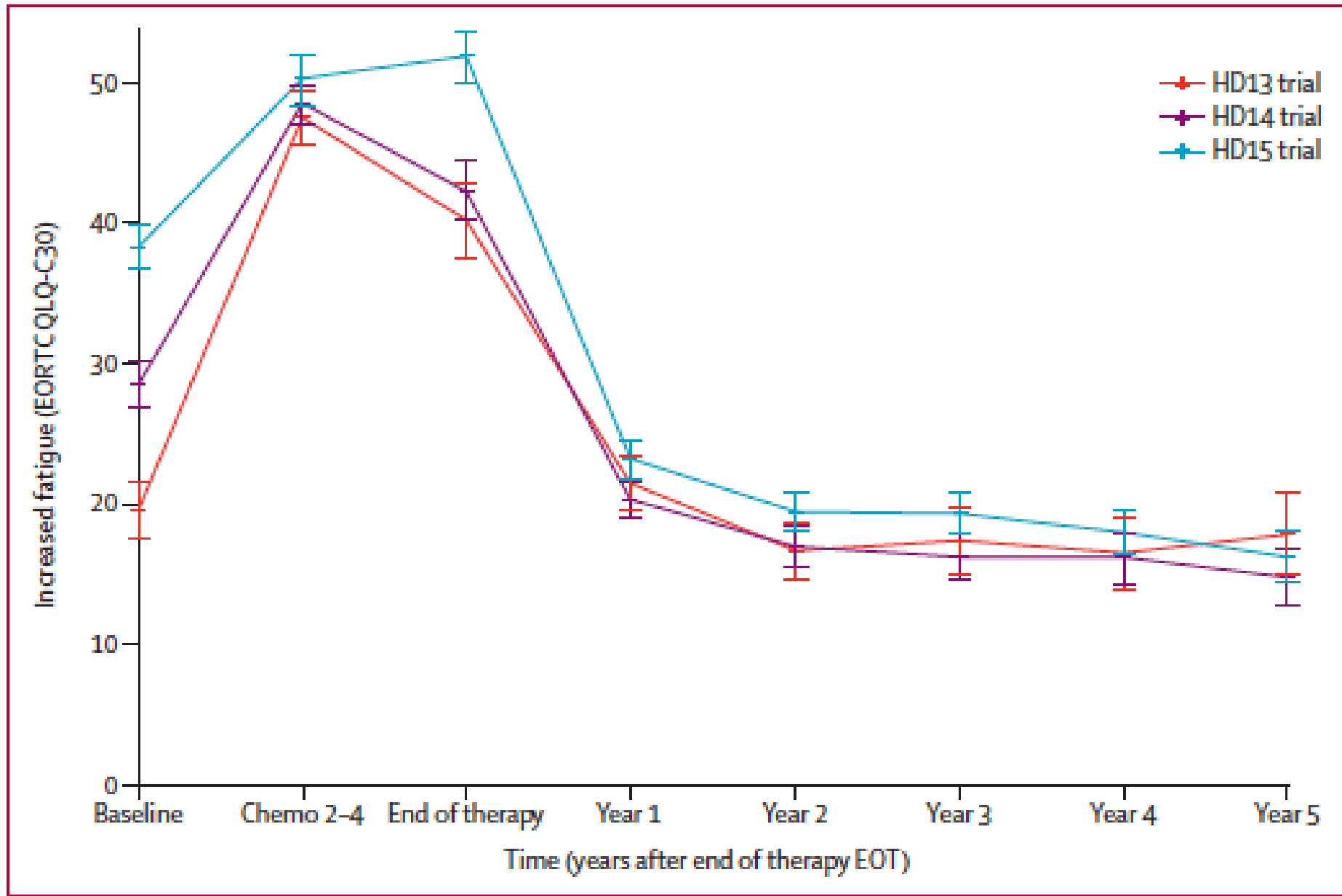


Figure 2: Longitudinal development of fatigue in the HD13, HD14, and HD15 trials up to 5 years after treatment
 Mean fatigue score normalised to the German population reference values (FA_{90}) and 95% CIs. EORTC=European Organisation for Research and Treatment of Cancer.

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden?

Ihre diagnostischen Kriterien?

Ihre Antwort auf die Frage: Was ist die Ursache von CRF?

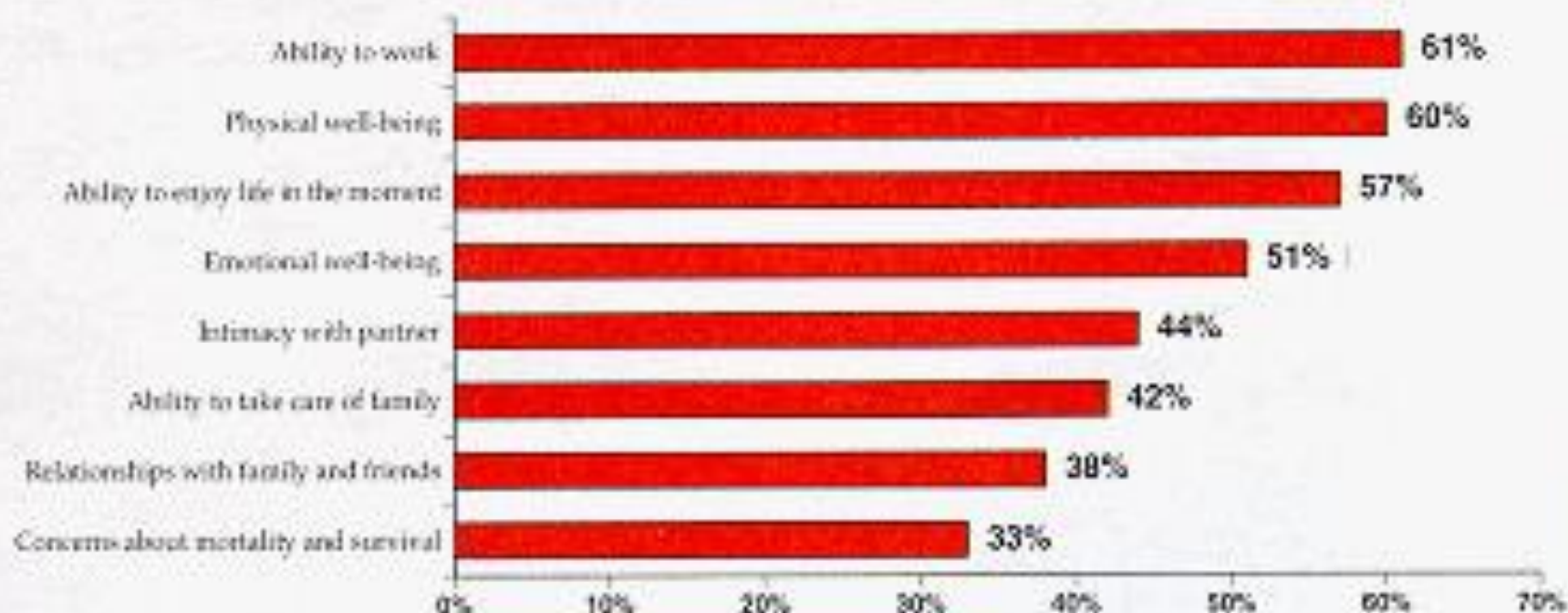
Ihre Einschätzung der Einschränkungen durch CRF?

Ihre Einschätzung der Arbeitsfähigkeit?

Ihre Antwort auf die Frage : Was tun?

Ihre Antwort auf die Frage: Wann wird das besser?

Impact of Fatigue among Cancer Patients



Cancer fatigue adversely affects significant aspects of patients' daily lives

Figure 2: These data on the impact of fatigue among cancer patients are based on a survey of 419 patients who had received chemotherapy or radiation therapy. Source: Ortho Biotech Inc.

Table 1. The impact of cancer-related fatigue on emotional health in patients ($n = 301$) undergoing treatment for cancer

Aspect reported in at least 50% of patients	Patients (%)
Having to push yourself to do things	77
Decreased motivation or interest in usual activities	62
Sadness, frustration, or irritability because of fatigue	53
Diminished interest in normal activities	51
Mental exhaustion	51

From Curt GA, Breitbart W, Cella D et al. Impact of cancer-related fatigue on the lives of patients: New findings from the Fatigue Coalition. *The Oncologist* 2000;5:353–360.

Vogelzang NJ, Breitbart W, Cella D et al. Patient, caregiver, and oncologist perceptions of cancer-related fatigue: results of a tripart assessment survey. The Fatigue Coalition. Semin Hematol 1997; 34: 4–12

„Welches Symptom beeinträchtigt das alltägliche Leben Ihrer Patienten mehr: Schmerzen oder Fatigue?“

	Patienten	Onkologen
Fatigue	61 %	37 %
Schmerzen	19 %	61 %
beides	5 %	2 %

Vogelzang NJ, Breitbart W, Cella D et al. Patient, caregiver, and oncologist perceptions of cancer-related fatigue: results of a tripart assessment survey. The Fatigue Coalition. Semin Hematol 1997; 34: 4–12

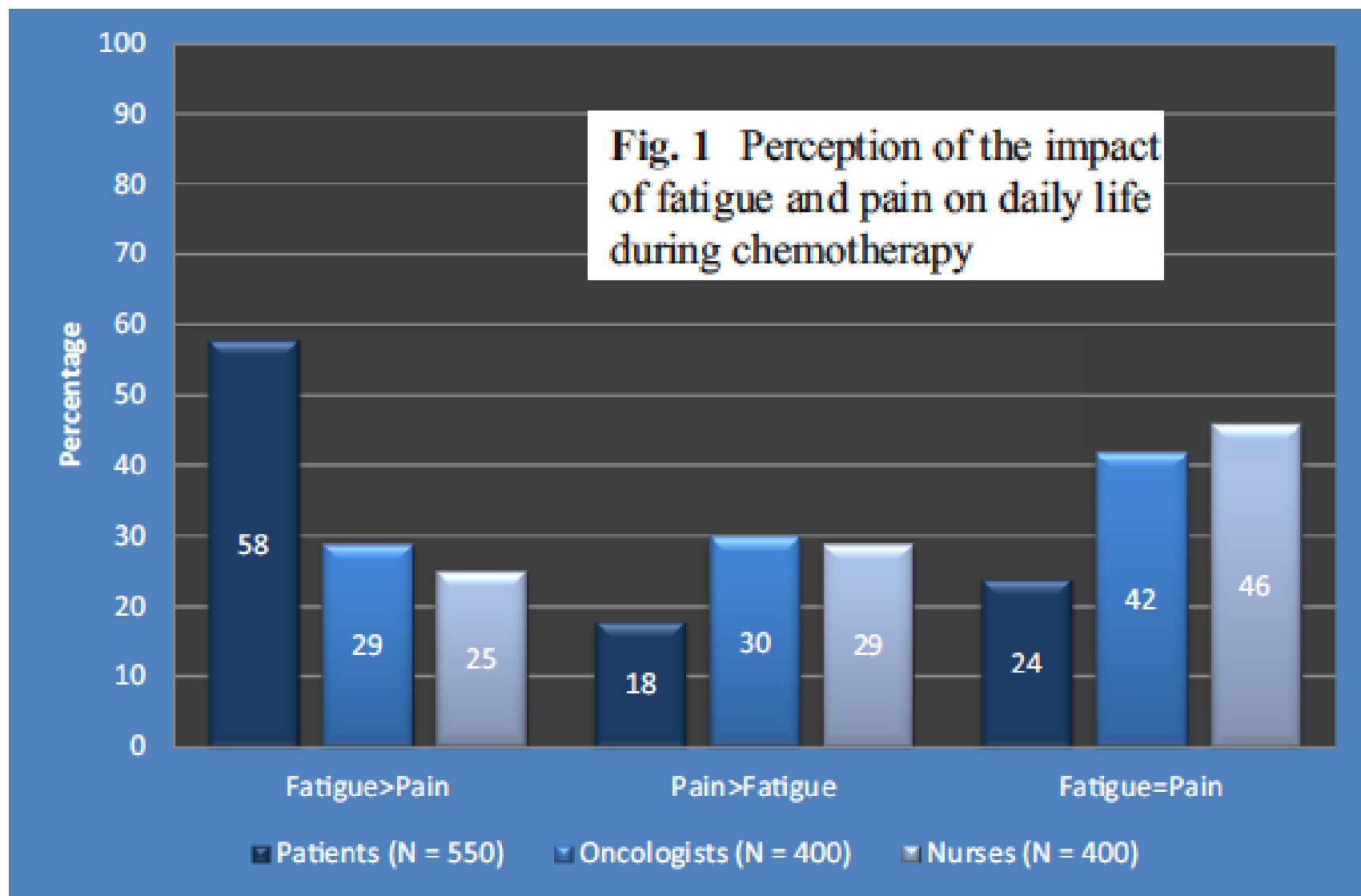
„War / ist es wichtiger, Schmerzen oder Fatigue durch eine Behandlung zu lindern?“

	Patienten	Onkologen
Fatigue	41 %	5 %
Schmerzen	34 %	94 %
beides	6 %	1 %

Patient and health care provider perceptions of cancer-related fatigue and pain

Support Care Cancer (2016) 24:4357–4363

Loretta A. Williams¹ • Chet Bohac² • Sharon Hunter² • David Cella³



Screening, Assessment, and Management of Fatigue in Adult Survivors of Cancer: An American Society of Clinical Oncology Clinical Practice Guideline Adaptation

Julienne E. Bower, Kate Bak, Ann Berger, William Breitbart, Carmelita P. Escalante, Patricia A. Ganz, Hester Hill Schnipper, Christina Lacchetti, Jennifer A. Ligibel, Gary H. Lyman, Mohammed S. Ogaily, William F. Pirl, and Paul B. Jacobsen

- A majority experience some level of fatigue during their course of treatment;
- Approximately 30% of patients will endure persistent fatigue for a number of years after treatment.
- Fatigue is one the most prevalent and distressing long-term effects of cancer treatment.

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden

Ihre diagnostischen Kriterien

Ihre Antwort auf die Frage: Was ist die Ursache von CRF

Ihre Einschätzung der Einschränkungen durch CRF

Ihre Einschätzung der Arbeitsfähigkeit

Ihre Antwort auf die Frage : Was tun?

Ihre Antwort auf die Frage: Wann wird das besser?

Factors associated with return to work of breast cancer survivors: a systematic review

Tania Islam^{1,3}, Maznah Dahlui¹, Hazreen Abd Majid¹, Azmi Mohamed Nahar², Nur Aishah Mohd Taib³, Tin Tin Su¹

- Aim of this systematic review study is to identify the prevalence of breast cancer survivors who return to work (RTW) and the factors associated to RTW
- RTW for the Netherland is the lowest (43%), RTW for the USA is the highest (93%) within 12 months of the diagnosis.
- Barriers: Education, ethnicity; chemotherapy; heavy physical work; poor health condition, **fatigue**; depression emotional distress
- Facilitators: social, family, employer support, and financial independency

Früher häufig als PÄUSBONOG fehldiagnostiziert!

- **P**athogenetisch-
- **Ä**tiologisch
- **U**nklare
- **S**yndromale
- **B**eschwerdebilder
- **O**hne
- **N**achweisbare
- **O**rganische
- **G**rundlage

- Fibromyalgie (ICD-10 Ziff. M79 .0) (BGE 132 V 65)
- Dissoziative Sensibilitäts- und Empfindungsstörung (ICD-10 Ziff. F44.6) (SVR 2007 IV Nr.45 S.149, I 9/07 E. 4)
- Chronisches Müdigkeitssyndrom (CFS) Neurasthenie (SVR 2011 IV Nr. 26 S. 73, 9C_662/2009 E. 2.3; SVR 2011 IV Nr. 17 S. 44, 9C_98/2010 E. 2.2.2; Urteil I 70/07 vom 14. April 2008 E. 5)= **Cancer related Fatigue**
- Schleudertrauma (ICD-10 S 13.4) (BGE 136 V 279)
- Nichtorganische Hypersomnie (BGE 137 V 64).

Dr. med. XX schreibt (Brief der SVA vom X.X.2012):

- "Was die neueste BG-Rechtsprechung entspricht, kommt ein weiterer Aspekt hinzu: die Diagnose eines Chronic Fatigue Syndroms wird heute bei mangelnder Komorbidität der Gruppe der syndromalen Beschwerden zugeordnet, welchen eine IV-Relevanz abgesprochen wird."



{T 0/2}

8C_32/2013

Urteil vom 19. Juni 2013

3.4. Definitionsbedingt tritt diese Form der Fatigue zwingend in Zusammenhang mit einer Krebserkrankung auf. Ein Hinweis auf die Einordnung in die somatoformen Störungen findet sich in der medizinischen Literatur nicht. Damit grenzt sich die tumorassoziierte Fatigue auch klar vom Chronic Fatigue Syndrome (CFS; ICD-10 G93.3) als eigenständiges Krankheitsbild ab, wenngleich die CrF noch nicht als eigene Krankheitsentität Eingang in die ICD (Internationale statistische Klassifikation der Krankheiten und verwandter Gesundheitsprobleme) gefunden hat. Es bestehen aber von der Fatigue-Coalition definierte Diagnosekriterien analog zu ICD-10-Kriterien (Heim/Feyer, a.a. O. S. 42). Als Begleitsymptom onkologischer Erkrankungen und ihrer Therapie liegt der CrF zumindest mittelbar

eine organische Ursache zugrunde, weshalb es sich mit der Vorinstanz nicht rechtfertigt, sozialversicherungsrechtlich auf die tumorassoziierte Fatigue die zum invalidisierenden Charakter somatoformer Schmerzstörungen entwickelten Grundsätze (**BGE 130 V 352**) analog anzuwenden.

Meine Sicht

- In der Begutachtung müssen Onkologen/Hämatologen für CRF zuständig und kompetent sein, sonst kümmern sich andere schlecht darum...
- Gutachter müssen sich kontinuierlich „schlau“ machen

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden

Ihre diagnostischen Kriterien

Ihre Antwort auf die Frage: Was ist die Ursache von CRF

Ihre Einschätzung der Einschränkungen durch CRF

Ihre Einschätzung der Arbeitsfähigkeit

Ihre Antwort auf die Frage : Was tun?

Ihre Antwort auf die Frage: Wann wird das besser?

VOLUME 32 · NUMBER 17 · JUNE 10 2014

JOURNAL OF CLINICAL ONCOLOGY

A S C O S P E C I A L A R T I C L E

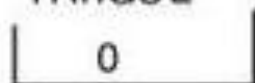
Screening, Assessment, and Management of Fatigue in Adult Survivors of Cancer: An American Society of Clinical Oncology Clinical Practice Guideline Adaptation

Julienne E. Bower, Kate Bak, Ann Berger, William Breitbart, Carmelita P. Escalante, Patricia A. Ganz, Hester Hill Schnipper, Christina Lacchetti, Jennifer A. Ligibel, Gary H. Lyman, Mohammed S. Ogaily, William F. Pirl, and Paul B. Jacobsen

Minimal Fatigue						Worst Fatigue Imaginable			
1	2	3	4	5	6	7	8	9	10
Mild			Moderate			Severe			



NO
FATIGUE



MILD



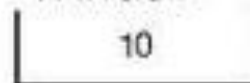
MODERATE



EXTREME



THE WORST
FATIGUE



Fatigue

Treat underlying causes

- Cachexia
- Anemia (transfusion/
erythropoietic therapy)
- Depression/anxiety
- Infection
- Hypoxia
- Autonomic dysfunction
- Immobility (deconditioning)
- Hypogonadism
- Other

Treat symptoms

Pharmacologic means

- Corticosteroids
- Megestrol
- Methylphenidate
- Modafanil
- Emerging drugs
(thalidomide, fish oil)
- Ginseng

Nonpharmacologic means

- Exercise
- Cognitive
Behavioral therapy
- Physical therapy
- Occupational therapy

FIGURE 2: Therapeutic approach to managing fatigue.



Cochrane Database of Systematic Reviews 2016, Issue 11. Art. No.: CD008144.

DOI: 10.1002/14651858.CD008144.pub2.

Educational interventions for the management of cancer-related fatigue in adults (Review)

Bennett S, Pigott A, Beller EM, Haines T, Meredith P, Delaney C

Educational interventions may have a small effect on reducing fatigue intensity, fatigue's interference with daily life, and general fatigue, and could have a moderate effect on reducing fatigue distress

Comparison of Pharmaceutical, Psychological, and Exercise Treatments for Cancer-Related Fatigue

A Meta-analysis

JAMA Oncol. doi:10.1001/jamaoncol.2016.6914

Published online March 2, 2017.

Karen M. Mustian, PhD, MPH; Catherine M. Alfano, PhD; Charles Heckler, PhD, MS; Amber S. Kleckner, PhD; Ian R. Kleckner, PhD;

- Severity of CRF was the primary outcome
- Meta-analysis of 113 unique studies (11 525 unique participants) found that exercise and psychological interventions and the combination of both reduce cancer-related fatigue during and after cancer treatment.
- Reduction was not due to time, attention, or education.
- In contrast, pharmaceutical interventions do not improve cancer-related fatigue to the same magnitude.

Living with fatigue



Table 2: Practical Tips for Patient Education

- Teach patients energy conservation strategies
- Encourage patients to exercise regularly
- Refer to cancer rehabilitation program
- Educate patients about sleep hygiene
- Limit naps to no longer than 20 to 30 minutes
- Address psychological needs
- Teach attention-restoring activities
- Refer to support group

Treatment and Care Map – Fatigue in Cancer Survivors

Treat Contributing Factors

Address all medical and substance-induced treatable contributing factors first (eg, pain, depression, anxiety, emotional distress, sleep disturbance, nutrition deficit, activity level, anemia, medication side-effects, and comorbidities). See Table 2 for more details.

Interventions for Cancer-Related Fatigue

Some patients may also benefit from interventions described below to treat fatigue. Currently, there are no clear standards to select among these for an individual patient. Further research is needed to establish a strategy for prioritizing, sequencing, and linking the available options. If treated for fatigue, patients should be followed and re-evaluated on a regular basis to determine whether treatment is effective or needs to be reassessed.

Physical Activity

- Initiating/maintaining adequate levels of physical activity can reduce cancer-related fatigue in post-treatment survivors.
- Actively encourage all patients to engage in a moderate level of physical activity after cancer treatment (eg, 150 minutes of moderate aerobic exercise [such as fast walking, cycling, or swimming] per week with an additional 2 to 3 strength training [such as weight lifting] sessions per week, unless contraindicated.
- Walking programs are generally safe for most cancer survivors; the American College of Sports Medicine recommends that cancer survivors can begin this type of program after consulting with their doctors, but without any formal exercise testing (such as a stress test).
- Survivors at higher risk of injury (eg, those living with neuropathy, cardiomyopathy, or other long-term effects of therapy other than comorbidities) should be referred to a physical therapist or exercise specialist. Breast cancer survivors with lymphedema should also consider meeting with an exercise specialist before initiating upper body strength-training exercise.

Psychosocial Interventions

- Cognitive behavioral therapy/behavioral therapy can reduce fatigue in cancer survivors.
- Psychoeducational therapies/educational therapies can reduce fatigue in cancer survivors.
- Survivors should be referred to psychosocial service providers who specialize in cancer and are trained to deliver empirically based interventions. Psychosocial resources that address fatigue may also be available through the National Cancer Institute (eg, Moving Beyond Breast Cancer videos).

Mind-Body Interventions

- There is some evidence that the following interventions can reduce fatigue in cancer survivors:
 - Mindfulness-based approaches
 - Yoga
 - Acupuncture
- The following interventions may offer some benefit; however, additional research, particularly in the post-treatment population, is needed:
 - Biofield therapies (touch therapy), massage, music therapy, relaxation, reiki, qigong

Pharmacologic Interventions

- Evidence suggests that psychostimulants (eg, methylphenidate) and other wakefulness agents (eg, modafinil) can be effectively used to manage fatigue in patients with advanced disease or those on active treatment. However, there is very limited evidence of their effectiveness in reducing fatigue in patients who are disease free following active treatment, outside of the treatment of obstructive sleep apnea.
- Small pilot studies have evaluated the impact of supplements, such as ginseng and vitamin D, for cancer-related fatigue. However, there is no consistent evidence of their effectiveness.

Ongoing Monitoring and Follow-up

Promote ongoing self-monitoring of fatigue levels as a late or long-term cancer or treatment problem in post-treatment survivors.

Investigation of 2 Types of Self-administered Acupressure for Persistent Cancer-Related Fatigue in Breast Cancer Survivors

A Randomized Clinical Trial

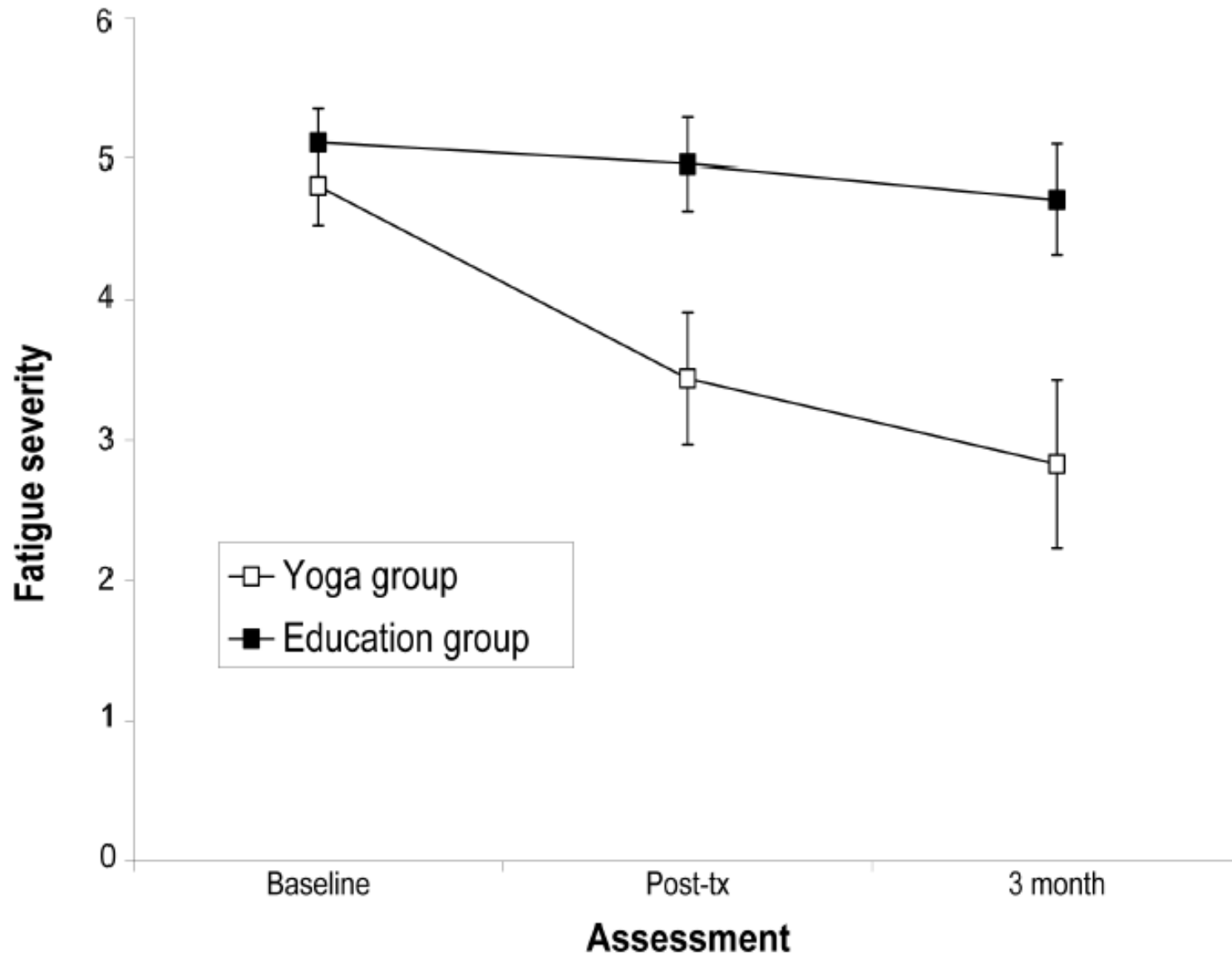
Suzanna M. Zick, ND, MPH; Ananda Sen, PhD; Gwen K. Wyatt, PhD, RN; Susan L. Murphy, PhD;

- Relaxing acupressure (n=94), stimulating acupressure (n=90), or usual care (n=86))
- Change in the Brief Fatigue Inventory score (BFIS) from baseline to weeks 6 and 10.
- At week 6, normal BFIS in 66 % in relaxing acupressure, 61% in stimulating acupressure, and 31% in usual care.
- At week 10, normal BFIS 56% in relaxing acupressure, 61% in stimulating acupressure, and 30% in usual care.

J. E. Bower et al.: Yoga for persistent fatigue in breast cancer survivors: A randomized controlled trial Cancer. 2012 August 1; 118(15): 3766–3775

- 31 women were randomly assigned to yoga (n 16) or health education (n 15).
- Fatigue severity declined significantly from baseline to post-treatment and over a 3 month follow-up in the yoga group relative to controls (P = .032).
- In addition, the yoga group showed significant increases in vigor relative to controls (P = .011).
- Both groups showed positive changes in depressive symptoms and perceived stress (P < .05).
- No significant changes in sleep or physical performance were observed.

J. E. Bower et al.: Yoga for persistent fatigue in breast cancer survivors: A randomized controlled trial *Cancer*. 2012 August 1; 118(15): 3766–3775





Yoga for improving health-related quality of life, mental health and cancer-related symptoms in women diagnosed with breast cancer (Review)

- Authors' conclusions

Moderate-quality evidence supports the recommendation of yoga as a supportive intervention for improving health-related quality of life and reducing fatigue and sleep disturbances when compared with no therapy, as well as for reducing depression, anxiety and fatigue, when compared with psychosocial/educational interventions

A mindfulness-based program for improving quality of life among hematopoietic stem cell transplantation survivors: feasibility and preliminary findings

Paul Grossman • Diana Zwahlen • Jorg P. Halter •
Jakob R. Passweg • Claudia Steiner • Alexander Kiss

- 32 patients having a mindfulness-based intervention (MBI) compared to 29 patients receiving psycho-oncological telephone consultations
- Assessments at baseline, post-intervention and 3 months follow-up.
- Primary outcome: HRQoL. Secondary outcomes: Depression, fatigue, anxiety personal goal attainment.
- Results: Improved HRQoL and reduced depression and anxiety at post-intervention (p 's < 0.05); 3-month follow-up benefits were modest.
- No effect on fatigue.

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden?

Ihre diagnostischen Kriterien?

Ihre Antwort auf die Frage: Was ist die Ursache von CRF?

Ihre Einschätzung der Einschränkungen durch CRF?

Ihre Einschätzung der Arbeitsfähigkeit?

Ihre Antwort auf die Frage : Was tun?

Ihre Antwort auf die Frage: Wann wird das besser?

Cancer-Related Fatigue in Women With Breast Cancer: Outcomes of a 5-Year Prospective Cohort Study

David Goldstein, Barbara K. Bennett, Kate Webber, Fran Boyle, Paul L. de Souza, Nicholas R.C. Wilcken,

- 218 women with early-stage breast cancer enrolled after surgery and observed after adjuvant treatment at 1, 3, 6, 9, and 12 months as well as 5 years.
- Case rate for CRF: 24% postsurgery, 31% at end of treatment, 11% at 6 months, 6% at 12 months, 12% at 5 years
- One third had comorbid mood disturbance.
- **Persistent CRF was predicted by tumor size** but not demographic, psychologic, surgical, or hematologic parameters.
- CRF was associated with significant disability and health care utilization.

VOLUME 30 · NUMBER 15 · MAY 20 2012

Fatigue in people with localized colorectal cancer who do and do not receive chemotherapy: a longitudinal prospective study

Annals of Oncology 27: 1761–1767, 2016

J. L. Vardy^{1,2,3*}, H. M. Dhillon¹, G. R. Pond⁴, C. Renton¹, A. Dodd², H. Zhang⁵,

- Patients completed the *Functional Assessment of Cancer Treatment-Fatigue (FACT-F) questionnaire* at baseline (before chemotherapy), 6, 12, and 24 months.
- Healthy controls (HCs) assessed at the first three time points.
- Patients more fatigued than HCs at baseline.
- Fatigue peaks after adjuvant chemotherapy and remains common for 2 years.
- Cognitive and affective symptoms, QoL, comorbidities, chemotherapy, and **baseline fatigue predict for longer term fatigue.**

Cancer-related fatigue in patients with and survivors of Hodgkin's lymphoma: a longitudinal study of the German Hodgkin Study Group

Stefanie Kreissl, Horst Mueller, Helen Goergen, Axel Mayer, Corinne Brillant, Karolin Behringer, Teresa Veronika Halbsguth, Felicitas Hitz,

- Fatigue up to 5 years after treatment in first-line clinical trials for early-stage favourable, early-stage unfavourable), and advanced-stage Hodgkin's lymphoma. (n=5306)
- To assess any effect of patient, disease or treatment characteristics on persistent fatigue.
- High incidence of severe acute and persistent fatigue in Hodgkin's lymphoma survivors
- **Fatigue at diagnosis is a strong predictor of persistent fatigue irrespective of disease stage and treatment.**

Lancet Oncol 2016

Published Online

September 6, 2016

[http://dx.doi.org/10.1016/](http://dx.doi.org/10.1016/S1470-2045(16)30093-6)

[S1470-2045\(16\)30093-6](http://dx.doi.org/10.1016/S1470-2045(16)30093-6)

VOLUME 32 · NUMBER 17 · JUNE 10 2014

JOURNAL OF CLINICAL ONCOLOGY

A S C O S P E C I A L A R T I C L E

Screening, Assessment, and Management of Fatigue in Adult Survivors of Cancer: An American Society of Clinical Oncology Clinical Practice Guideline Adaptation

Julienne E. Bower, Kate Bak, Ann Berger, William Breitbart, Carmelita P. Escalante, Patricia A. Ganz, Hester Hill Schnipper, Christina Lacchetti, Jennifer A. Ligibel, Gary H. Lyman, Mohammed S. Ogaily, William F. Pirl, and Paul B. Jacobsen

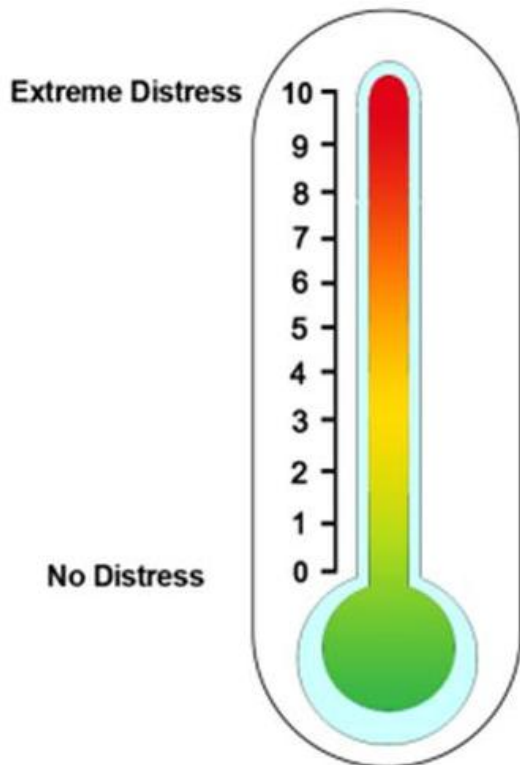
Screening

- All health care providers should routinely screen for the presence of fatigue
- All patients should be screened for fatigue at least annually.
- Screening should be performed for example, on a 0 to 10 numeric rating scale (0, no fatigue; 10, worst fatigue imaginable)
- Because fatigue is rarely an isolated symptom, patients who report moderate to severe fatigue should undergo a comprehensive assessment.

The Distress Thermometer

First please circle the number (0-10) that best describes how much distress you have been experiencing in the past week including today.

Second, please indicate if any of the following has been a problem for you in the past week including today. Be sure to check YES or NO for each.



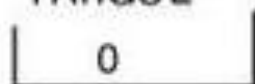
	YES	NO		YES	NO	
	<input type="checkbox"/>	<input type="checkbox"/>	Practical Problems	<input type="checkbox"/>	<input type="checkbox"/>	Physical Problems
	<input type="checkbox"/>	<input type="checkbox"/>	Child Care	<input type="checkbox"/>	<input type="checkbox"/>	Appearance
	<input type="checkbox"/>	<input type="checkbox"/>	Housing	<input type="checkbox"/>	<input type="checkbox"/>	Bathing/dressing
	<input type="checkbox"/>	<input type="checkbox"/>	Insurance/financial	<input type="checkbox"/>	<input type="checkbox"/>	Breathing
	<input type="checkbox"/>	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	<input type="checkbox"/>	Changes in urination
	<input type="checkbox"/>	<input type="checkbox"/>	Work/school	<input type="checkbox"/>	<input type="checkbox"/>	Constipation
				<input type="checkbox"/>	<input type="checkbox"/>	Diarrhoea
			Family Problems	<input type="checkbox"/>	<input type="checkbox"/>	Eating
	<input type="checkbox"/>	<input type="checkbox"/>	Dealing with children	<input type="checkbox"/>	<input type="checkbox"/>	Fatigue
	<input type="checkbox"/>	<input type="checkbox"/>	Dealing with partner	<input type="checkbox"/>	<input type="checkbox"/>	Feeling Swollen
	<input type="checkbox"/>	<input type="checkbox"/>	Dealing with close	<input type="checkbox"/>	<input type="checkbox"/>	Fevers
	<input type="checkbox"/>	<input type="checkbox"/>	Friend/relative	<input type="checkbox"/>	<input type="checkbox"/>	Getting around
				<input type="checkbox"/>	<input type="checkbox"/>	Indigestion
			Emotional Problems	<input type="checkbox"/>	<input type="checkbox"/>	Memory/concentration
	<input type="checkbox"/>	<input type="checkbox"/>	Depression	<input type="checkbox"/>	<input type="checkbox"/>	Mouth sores
	<input type="checkbox"/>	<input type="checkbox"/>	Fears	<input type="checkbox"/>	<input type="checkbox"/>	Nausea
	<input type="checkbox"/>	<input type="checkbox"/>	Nervousness	<input type="checkbox"/>	<input type="checkbox"/>	Nose dry/congested
	<input type="checkbox"/>	<input type="checkbox"/>	Sadness	<input type="checkbox"/>	<input type="checkbox"/>	Pain
	<input type="checkbox"/>	<input type="checkbox"/>	Worry	<input type="checkbox"/>	<input type="checkbox"/>	Sexual
	<input type="checkbox"/>	<input type="checkbox"/>	Loss of interest in usual activities	<input type="checkbox"/>	<input type="checkbox"/>	Skin dry itchy
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Sleep
	<input type="checkbox"/>	<input type="checkbox"/>	Spiritual/religious concerns	<input type="checkbox"/>	<input type="checkbox"/>	Tingling in hands/feet

Other problems

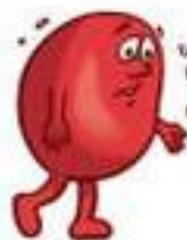
Minimal Fatigue						Worst Fatigue Imaginable			
1	2	3	4	5	6	7	8	9	10
Mild			Moderate			Severe			



NO
FATIGUE



MILD



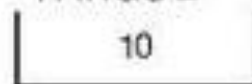
MODERATE



EXTREME



THE WORST
FATIGUE



**Edmonton Symptom Assessment System:
(revised version) (ESAS-R)**

Please circle the number that best describes how you feel NOW:

No Pain 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Pain

No Tiredness 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Tiredness
(Tiredness = lack of energy)

No Drowsiness 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Drowsiness
(Drowsiness = feeling sleepy)

No Nausea 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Nausea

No Lack of Appetite 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Lack of Appetite

No Shortness of Breath 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Shortness of Breath

No Depression 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Depression
(Depression = feeling sad)

No Anxiety 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Anxiety
(Anxiety = feeling nervous)

Best Wellbeing 0 1 2 3 4 5 6 7 8 9 10 Worst Possible Wellbeing
(Wellbeing = how you feel overall)

No _____ 0 1 2 3 4 5 6 7 8 9 10 Worst Possible _____
Other Problem (for example constipation)

Patient's Name _____

Date _____ Time _____

Completed by (check one):

- Patient
- Family caregiver
- Health care professional caregiver
- Caregiver-assisted

Screen for fatigue¹ at entry to system, periodically during treatment and during post-treatment survivor follow-up.²

Tiredness identified on ESAS screening (Tiredness item)

ESAS score 1-3

Minimal fatigue symptoms
Able to carry out Activities of
Daily Living (ADLs)

Go to Care Map

ESAS score 4-6

ESAS score >7

- Review problem checklist and all ESAS scores in conversation³ with patient/family and discuss expectations and beliefs about support needs (e.g., CPC¹)

Focused Fatigue Assessment (option to use revised Piper Scale, FACT-F)⁴

- O – Fatigue onset (when did fatigue begin)
- P – What do you do to relieve your fatigue?
- Q – Ask patient for description of fatigue in own words?
- R – Other symptoms with fatigue?
- S – Fatigue duration ○ constant ○ changes over time
- T – Has there been a change in the medications you are taking, including over-the-counter medications?
- U – What do you believe is causing your fatigue?
 - I – How is fatigue affecting your activities of daily living? And lifestyle (work, social life, concentration, memory)? How distressing (bothersome) is fatigue?
- V – What is your goal for this symptom?

Routinely screen for fatigue

Use a numeric rating scale as clinically indicated and at least annually.

Education and Counseling

- All patients should be offered specific education about fatigue following treatment (eg, information about the difference between normal and cancer-related fatigue, persistence of fatigue post treatment, and causes and contributing factors). All patients should be offered advice on general strategies that help manage fatigue (eg, maintaining physical activity) and guidance on self-monitoring of fatigue levels.

Comprehensive and Focused Assessment (for patients who report moderate to severe fatigue)

History and Physical

1) Perform a focused fatigue history, including:

- Onset, pattern, duration
- Change over time
- Associated or alleviating factors

2) Evaluate disease status by:

- Evaluate risk of recurrence based on stage, pathologic factors, and treatment history
- Perform review of systems to determine if other symptoms substantiate suspicion for recurrence

3) Assess treatable contributing factors:

- Comorbidities (eg, cardiac dysfunction, endocrine dysfunction, pulmonary dysfunction, renal dysfunction, anemia, arthritis, neuromuscular complications, sleep disturbances, pain, emotional distress)
- Medications (consider persistent use of sleep aids, pain medications, or antiemetics)
- Alcohol/substance abuse
- Nutritional issues
 - Weight/caloric intake changes
- Deconditioning

As a shared responsibility, the clinical team must decide when referral to an appropriately trained professional (eg, cardiologist, endocrinologist, mental health professional, internist) is needed.

Laboratory Evaluation

- Consider performing laboratory evaluation based on presence of other symptoms, onset, and severity of fatigue
- CBC with differential
 - Compare end-of-treatment hemoglobin/hematocrit with current values
 - Assess other cell lines (WBC and platelets)
- Comprehensive metabolic panel
 - Assess electrolytes
 - Assess hepatic and renal function
- Endocrinologic evaluation
 - TSH
 - Consider more comprehensive evaluation or referral to specialist if other symptoms present

Take Home Messages

Ihr letzter Patient mit CRF

Wer ?

Seine/Ihre Beschwerden?

Ihre diagnostischen Kriterien?

Ihre Antwort auf die Frage: Was ist die Ursache von CRF?

Ihre Einschätzung der Einschränkungen durch CRF?

Ihre Einschätzung der Arbeitsfähigkeit?

Ihre Antwort auf die Frage : Was tun?

Ihre Antwort auf die Frage: Wann wird das besser?