ELSEVIER

Journal of Psychosomatic Research 61 (2006) 595–599

Journal of Psychosomatic Research

Well-being in patients with chronic fatigue syndrome: The role of acceptance

Stefaan Van Damme[a,*], Geert Crombez[a], Boudewijn Van Houdenhove[b], An Mariman[c], Walter Michielsen[c]

[a]*Department of Experimental-Clinical and Health Psychology, Ghent University, Ghent, Belgium*
[b]*University Hospital, Leuven, Belgium*
[c]*University Hospital, Ghent, Belgium*

Received 6 December 2005; received in revised form 6 April 2006; accepted 25 April 2006

Abstract

Objective: Research in chronic pain patients has shown that accepting the chronic nature of their illness is positively related to quality of life. The aim of this study was to investigate whether acceptance is also associated with better well-being in patients suffering from chronic fatigue syndrome (CFS). **Methods:** Ninety-seven patients completed a battery of questionnaires measuring fatigue, functional impairment, psychological distress, and acceptance. **Results:** Results indicated that acceptance has a positive effect upon fatigue and psychological aspects of well-being. More specifically, acceptance was related to more emotional stability and less psychological distress, beyond the effects of demographic variables, and fatigue severity. **Conclusion:** We suggest that promoting acceptance in patients with CFS may often be more beneficial than trying to control largely uncontrollable symptoms.

Keywords: Chronic fatigue syndrome; Quality of life; Acceptance; Illness cognitions

Introduction

Chronic fatigue syndrome (CFS) is a severe and invalidating experience of fatigue, which lasts for at least 6 months [1]. Most patients report a low ability in somatic, psychological, cognitive, and social functioning, which often leads to professional difficulties [2–6]. As yet, the experience of chronic fatigue is medically unexplained [7]. In an attempt to diminish suffering and improve quality of life, several models have been developed, addressing possible initiating, exacerbating, and maintaining factors [8,9]. One factor that has proven to be related to the functioning of CFS patients is self-efficacy. Research has revealed that self-efficacy, defined as the perceived ability to control illness, has a positive effect on fatigue and associated impairments [10–12]. Although there is definitely merit in the idea that active attempts to control fatigue and disability contribute to a better quality of life, there may sometimes be negative effects. In particular, research in patients with chronic pain has pointed out that attempts to control uncontrollable pain may prove futile and may only fuel frustration, distress, and hypervigilance to symptoms [13–15]. Research with chronic pain patients has shown that giving up attempts to control pain and accepting chronic pain lead to a better adjustment to chronic pain [16]. In a questionnaire study [17] in 160 chronic pain patients, acceptance of pain was associated with less psychological distress, and less disability, even after controlling for the effects of pain severity. Similar results emerged from a study in patients with rheumatoid arthritis and multiple sclerosis [18]. That study further showed that acceptance was associated with an increase in physical and psychological

* Corresponding author. Department of Experimental-Clinical and Health Psychology, Ghent University, Henri Dunantlaan 2, B-9000 Ghent, Belgium. Tel.: +32 9 264 91 49; fax: +32 9 264 64 89.

E-mail address: stefaan.vandamme@ugent.be (S. Van Damme).

0022-3999/06/$ – see front matter © 2006 Elsevier Inc. All rights reserved.
doi:10.1016/j.jpsychores.2006.04.015

health status at a 1-year follow-up. Viane et al. [19] investigated the role of acceptance in well-being in two questionnaire studies with chronic pain patients. Both studies showed that acceptance was related to better psychological but not physical well-being.

Acceptance is a complex construct that consists of several components. Although many patients relate acceptance to giving up, recent studies have explicitly rejected this negative view [20]. McCracken and Eccleston [14] have argued that acceptance is best conceived of as halting the dominant search for a definitive solution of physical complaints and as a reorientation of attention towards positive everyday activities and other aspects of life. Research has further indicated that acceptance often involves a search for a new identity, implying a re-evaluation of personal goals, values, and life priorities [21].

Although the idea of acceptance is less common in the field of CFS than in chronic pain, there is ongoing discussion in clinical practice about whether the aim of cognitive-behavior therapy should be learning to control fatigue or pacing and accepting limitations. In the present study, we investigate whether acceptance contributes to well-being in patients with CFS. We hypothesize that acceptance will be associated with lower levels of fatigue, psychological distress, and functional impairment.

Method

Participants

The sample consisted of 110 patients with CFS who were on a waiting list for cognitive-behavioral treatment in the Ghent university hospital. All patients fulfilled the CDC [1] criteria for CFS. The study was approved by the local ethical committee, and all patients provided informed consent. They received a package of questionnaires by mail and were requested to send it back after completion.

Questionnaires

We used three indicators of well-being: fatigue [Checklist Individual Strength (CIS)], psychological distress [Hospital Anxiety and Depression Scale (HADS)], and functional impairment [Sickness Impact Profile-68 (SIP-68)]. Acceptance was measured by the Illness Cognition Questionnaire (ICQ). These instruments are further discussed below.

We assessed fatigue severity by the self-reported fatigue subscale of CIS [22]. This instrument measures different aspects of fatigue during the past 2 weeks on a 7-point scale: (1) self-reported fatigue (8 items, e.g., "I feel tired"), (2) concentration (5 items, e.g., "I have trouble concentrating"), (3) motivation (4 items, e.g., "I feel no desire to do anything"), and (4) physical activity (3 items, e.g., "I have a low output"). Research has shown that CIS is reliable and valid both in healthy individuals and patients with CFS [12].

We measured psychological distress by the Dutch version of HADS [23], which was developed to measure anxiety and depressive symptoms in patients with somatic disorders. The HADS consists of 14 items divided into two equal subscales: anxiety and depression. The total score is a valid indicator of psychological distress [24]. In order to avoid content overlap with fatigue, we omitted one item from the depression subscale (item 8: "feeling slowed down").

We used the short version of the SIP [25,26] to assess functional impairment. This questionnaire consists of 68 items and assesses the impact of illness upon various domains of daily functioning. The short version has six subscales: (1) "Somatic autonomy" assesses the level at which basic somatic functions can be performed without help (17 items, e.g., "I stand up only with someone's help"). (2) "Mobility control" describes the level of control over one's body (12 items, e.g., "I walk shorter distances or stop to rest often"). (3) "Psychic autonomy and communication" describes the level at which one is able to operate independently in areas of mental functioning and verbal communication (11 items, e.g., "I have difficulty doing activities involving concentration and thinking"). (4) "Social behavior" assesses the consequences of the health problem on one's functioning in relation to other people, such as sexual activity and visiting friends (12 items, e.g., "I am doing fewer social activities with groups of people"). (5) "Emotional stability" describes the effects of the health problem on one's emotional status (6 items, e.g., "I often act irritable toward those around me, for example, snap at people, give sharp answers, criticize easily"). (6) "Mobility range" relates to limitations in the range of behaviors due to the health status (10 items, e.g., "I am doing any of the house cleaning that I would usually do"). Higher scores are indicative of more functional impairments. A total score can be computed. Psychometric research has indicated that SIP-68 is reliable and valid [27].

We assessed acceptance by using ICQ [18], which measures illness cognitions in patients with chronic diseases. This instrument is mainly used in patients with rheumatoid arthritis, multiple sclerosis, or chronic pain, but is applicable to other chronic illnesses. The ICQ consists of 18 items, measuring three types of illness cognitions, which reflect different ways of dealing with a chronic disease: (1) helplessness (6 items, e.g., "My illness controls my life"), (2) acceptance (6 items: "I can handle the problems related to my illness," "I have learned to live with my illness," "I have learned to accept the limitations imposed by my illness," "I can accept my illness well," "I think I can handle the problems related to my illness, even if the illness gets worse," and "I can cope effectively with my illness"), and (3) perceived benefits (6 items, e.g., "Dealing with my illness has made me a stronger person"). Psychometric research indicates that the ICQ is a reliable and valid instrument [18].

Table 1
Correlations between indicators of well-being, fatigue, and acceptance

	Mean	S.D.	1	2	3
1. CIS (fatigue)	47.52	10.47			
2. SIP-68	19.32	10.06	.49***		
3. HADS	19.68	6.02	.40***	.33**	
4. ICQ (acceptance)	13.64	4.12	−.41***	−.25*	−.54***

* $P<.05$.
** $P<.01$.
*** $P<.001$.

Statistical analyses

First, we report a number of descriptive statistics in our sample. Second, we calculated correlations between fatigue severity, functional impairment, psychological distress, and acceptance to detect significant relations. Third, we performed hierarchical regression analyses to investigate the unique and independent role of acceptance in well-being in our sample of CFS patients. Fatigue severity, psychological distress, and functional impairment were dependent variables in these multiple regression analyses. We used a similar inclusion strategy for each regression analysis. In the first step, we controlled for demographic variables by forcing age, sex, and educational level into the equation. In the second step, we entered fatigue severity and duration into the equation, except for the regression upon fatigue severity, where depression (HADS depression subscale) was entered as an independent variable. In the third step, we entered acceptance. Because this resulted in nine regressions, significance in the final model was evaluated after a Bonferroni correction ($P<.006$).

Results

Characteristics of patient sample

The initial response ratio was 72% and amounted to 91% after a reminder by telephone. Questionnaire data were incomplete in three patients. Valid questionnaire data were available for 97 patients. The final sample consisted of 19 males and 78 females, with a mean age of 40.06 years (SD=8.36; range: 21–58 years). Mean duration of the complaints was 7.89 years (SD=6.30; range: 1–26 years). Respectively 30% and 34% of the patients had a disease or invalidity benefit, and most of them cited this as their major source of income. About one fourth of the sample (25.7%) was still employed. More than one third of the sample (36.6%) had lower or profession education as highest education level, whereas 17.2% received middle education. A large group (36.5%) had higher nonuniversity education, and 9.7% received university education.

Mean self-report scores on all instruments are presented in Table 1. The mean scores on the CIS and the SIP-68 are indicative of severe fatigue and functional impairment [22,27]. The HADS scores are indicative of psychological distress in our sample [23].

Correlation analyses

Correlations are shown in Table 1. Of particular relevance is that acceptance is negatively correlated with all three indicators of well-being, showing that acceptance is associated with lower levels of fatigue, functional impairment, and psychological distress.

Regression analyses

The results of the regression analyses are reported in Table 2. Acceptance is a unique predictor of fatigue severity, beyond the effects of depression, as measured by the HADS. Furthermore, fatigue severity is a significant predictor of both psychological distress and functional impairment. However, psychological distress is best predicted by acceptance, explaining an additional 16% of the variance beyond the effects of demographic characteristics, fatigue severity, and duration of the complaints.

The regressions on the six subscales of the SIP-68 allow a more fine-grained analysis of the different domains of functioning. Fatigue severity is the best predictor in most aspect of functional impairment. However, acceptance is the strongest predictor of "emotional stability," explaining an additional 9% of the variance beyond self-reported fatigue

Table 2
Hierarchical regressions on different indicators of well-being

Dependent variable	Predictors	ΔR^2	R^2 (adjusted)	β (standardized)	P
Fatigue severity	Depression	$.15^{b}$	$.12^{b}$	.27	.016
	Acceptance	$.06^{a}$	$.17^{c}$	−.26	.017
Psychological distress	Fatigue severity	$.15^{b}$	$.11^{a}$	.23	.026
	Acceptance	$.16^{c}$	$.27^{c}$	−.43	*.000*
Functional impairment	Fatigue severity	$.23^{c}$	$.28^{c}$	.40	*.000*
	Acceptance	.02	$.28^{c}$	−.14	.154
Somatic autonomy	Fatigue duration	$.09^{a}$	$.13^{b}$	.24	.021
	Acceptance	.00	$.13^{b}$	.07	.532
Mobility control	Fatigue severity	$.13^{c}$	$.23^{c}$	.27	.009
	Acceptance	.02	$.24^{c}$	−.15	.131
Psychic autonomy	Fatigue severity	$.11^{b}$	$.15^{b}$	.27	.013
	Acceptance	.01	$.15^{b}$	−.10	.366
Social behavior	Fatigue severity	$.25^{c}$	$.27^{c}$	.49	*.000*
	Acceptance	.00	$.26^{c}$	−.04	.675
Emotional stability	Acceptance	$.09^{b}$	$.10^{a}$	−.32	*.005*
Mobility range	Fatigue severity	$.10^{a}$	$.10^{a}$	.31	*.004*
	Acceptance	.00	$.09^{a}$	−.05	.674

Only acceptance and significant predictors in the final model are reported. P values for standardized β's in italics indicate significant contributions of predictors after Bonferroni correction for multiple (9) comparisons ($P<.006$).

[a] $P<.05$.
[b] $P<.01$.
[c] $P<.001$.

and duration of the complaints. A higher level of acceptance is related to less problems on this domain.

Discussion

The main finding of this study is the effect of acceptance upon several domains of well-being, which is a new and intriguing finding in the field of CFS. Particularly interesting is the protective role of acceptance in psychological aspects of well-being. This may be important, because it is well-known that problems in psychological functioning may maintain chronic illnesses such as CFS [28]. Although new in CFS research, the positive role of acceptance in psychological well-being is in line with several studies in the field of chronic pain [14,17,19,29].

Our findings may have implications for the treatment of CFS. Cognitive-behavioral therapy (which often includes graded exercise training) is considered an effective treatment for patients with CFS [30–35]. By working on fatigue-related cognitions, and more particularly on self-efficacy, the activity level of patients is gradually increased, aiming at resumption of work and obtaining personal goals. However, research in patients with chronic pain warns for potentially disadvantageous effects of unsuccessful attempts to actively cope with fatigue [16]. Repeated failures may result in more somatic and psychological distress. Of importance is how to conceive recovery as a treatment objective when a return to premorbid functioning has become impossible. We argue that recovery is more than just the decrease or disappearance of symptoms, but also relates to lower levels of functional impairment and psychological distress [36]. Within this broad conceptualization of recovery, acceptance of illness and functional impairment may be a useful addition to current cognitive-behavioral models and treatments of CFS. Certainly, acceptance is already an implicit theme in cognitive-behavioral therapy for CFS patients being periodically too active [30–35]. However, we believe that, given its strong positive effect upon physical and psychological well-being, a more explicit and systematic use of the acceptance theme might be beneficial for the majority of CFS patients. More particularly, acceptance may be an essential precondition for the therapeutic process, in which patients have to evaluate—and if necessary adjust—their former lifestyle. For many of them, this implies strategies such as activity pacing, aimed at adapting their activity level to the lowered physical limits imposed by their illness [37]. This is particularly relevant giving the premorbid “overactive” lifestyle characterizing a substantial part of the CFS patients [38]. Note that it is important that patients learn that acceptance is no sign of weakness or the end of a meaningful life. They have to learn to acknowledge reality and quitting efforts that are not working so that more workable and meaningful goals can be achieved [16].

Our study has a number of limitations. First, to our knowledge, this is the first study investigating the role of acceptance in quality of life in patients with CFS. More research is needed to confirm our findings in other samples of CFS patients and to investigate whether acceptance in CFS operates in the same way as in other chronic illnesses. Second, as in most studies investigating the role of psychological variables in quality of life, the present study is cross-sectional, as a result of which no conclusions can be drawn about the causality of the associations found. Longitudinal studies investigating the effects of acceptance upon well-being are required in future research [39]. Third, in order to allow testing our hypotheses in a proper way, we treated all questionnaires as ratio scales. Because the SIP-68 is not a Likert scale, caution is warranted in interpreting the results obtained with this instrument. Fourth, we used only one questionnaire to measure acceptance. It is therefore possible that we overlooked important aspects of the concept of acceptance. Of particular importance may be the aspects of engagement in meaningful activities despite illness, and changes in identity and self [16,40]. In future research, more instruments should be developed or adapted for use in patients with CFS, allowing the investigation of the whole range of aspects associated with acceptance.

Despite these limitations, our findings indicate that acceptance may play an important role in the well-being of patients with CFS. More particularly, acceptance of the limitations imposed by CFS may protect the psychological aspects of quality of life, leading to less depression and anxiety, and more emotional stability. As acceptance is also associated with lower levels of fatigue, this may be a useful addition to current cognitive-behavioral models and treatments of CFS. As this is, to our knowledge, the first study systematically investigating the role of acceptance in well-being in CFS, further research is necessary to confirm our findings and to extend them with other aspects of the concept of acceptance.

Acknowledgment

Stefaan Van Damme is a postdoctoral researcher of the Fund for Scientific Research Flanders (Belgium). The authors want to thank Ilse Viane and Karen Panis for their input in previous versions of this paper.

Part of the data presented in this study has been published in Dutch. Source: Van Damme, S., Viane, I., Panis, K., Van Duysse, A., Mariman, A., Michielsen, W., & Crombez, G. De invloed van aanvaarding op kwaliteit van leven bij patiënten met het chronisch vermoeidheidssyndroom [The role of acceptance in quality of life in patients with chronic fatigue syndrome]. Gedragstherapie 2004;37:241–51.

References

[1] Fukuda K, Straus SE, Hickie I, Sharpe MC, Dobbins JG, Komaroff A. The chronic fatigue syndrome: a comprehensive approach to its definition and study. Ann Intern Med 1994;121:953–9.

[2] Anderson JS, Ferrans CE. The quality of life of persons with chronic fatigue syndrome. J Nerv Ment Dis 1997;185:359–67.
[3] Friedberg F, Jason LA. Understanding chronic fatigue syndrome: an empirical guide to assessment and treatment. Washington (DC): American Psychological Association, 1998.
[4] Schweitzer R, Kelly B, Foran A, Terry D, Whiting J. Quality of life in chronic fatigue syndrome. Soc Sci Med 1995;41:1367–72.
[5] Taillefer SS, Kirmayer LJ, Robbins JM, Lasry J. Psychological correlates of functional status in chronic fatigue syndrome. J Psychosom Res 2002;53:1097–106.
[6] Wessely S, Hirsch S, Wright D. The prevalence and morbidity of chronic fatigue and chronic fatigue syndrome: a prospective primary care study. Am J Public Health 1997;87:114–45.
[7] Moss-Morris R, Chalder T. Illness perceptions and levels of disability in patients with chronic fatigue syndrome and rheumatoid arthritis. J Psychosom Res 2003;55:305–8.
[8] Vercoulen JHHM, Swanink CM, Galama JM, Fennis JF, Jongen PJ, Hommes OR, van der Meer JWM, Bleijenberg G. The persistent of fatigue in chronic fatigue syndrome and multiple sclerosis: development of a model. J Psychosom Res 1998;45:507–17.
[9] Wessely S, Sharpe M. Chronic fatigue, chronic fatigue syndrome, and fybromyalgia. In: Mayou R, Bass C, editors. Treatment of functional somatic symptoms. Oxford: Oxford University Press, 1995. pp. 285–312.
[10] Findley JC, Kerns R, Weinberg LD, Rosenberg R. Self-efficacy as a psychological moderator of chronic fatigue syndrome. J Behav Med 1998;21:351–62.
[11] Ray C, Jefferies S, Weir W. Coping and other predictors of outcome in chronic fatigue syndrome: a 1-year follow-up. J Psychosom Res 1997;43:405–15.
[12] Vercoulen JHHM, Swanink CM, Galama JM, Fennis JF, van der Meer G, Bleijenberg G. Prognosis in chronic fatigue syndrome (CFS): a prospective study on the natural course. J Neurol Neurosurg Psychiat 1996;60:489–94.
[13] Aldrich S, Eccleston C, Crombez G. Worrying about chronic pain: vigilance to threat and misdirected problem solving. Behav Res Ther 2000;38:457–70.
[14] McCracken LM, Eccleston C. Coping or acceptance: what to do about chronic pain? Pain 2003;105:197–204.
[15] De Vlieger P, Crombez G, Eccleston C. Worrying about chronic pain: an examination of worry and problem solving in adults who identify as chronic pain sufferers. Pain 2006;120:138–44.
[16] McCracken LM, Carson JW, Eccleston C, Keefe FJ. Acceptance and change in the context of chronic pain. Pain 2004;109:4–7.
[17] McCracken LM. Learning to live with the pain: acceptance of pain predicts adjustments in persons with chronic pain. Pain 1998;74:21–7.
[18] Evers AWM, Kraaimaat FW, Floris W, van Lankveld W, Jacobs JWG, Bijlsma JWJ. Beyond unfavorable thinking: the illness cognition questionnaire for chronic diseases. J Consult Clin Psychol 2001; 69:1026–36.
[19] Viane I, Crombez G, Eccleston C, Poppe C, Devulder J, Van Houdenhove B, De Corte W. Acceptance of pain is an independent predictor of mental well-being in patients with chronic pain: empirical evidence and reappraisal. Pain 2003;106:65–72.
[20] Risdon A, Eccleston C, Crombez G, McCracken LM. How can we learn to live with pain A Q-methodological analysis of the diverse understandings of acceptance of chronic pain. Soc Sci Med 2003; 56:375–86.
[21] Brandtstädter J, Rothermund K. Life-course dynamics of goal pursuit and goal adjustment: a two-process framework. Dev Rev 2002; 22:117–50.
[22] Vercoulen JHHM, Swanink CMA, Fennis JFM, Galama JMD, van der Meer JWM, Bleijenberg G. Dimensional assessment of chronic fatigue syndrome. J Psychosom Res 1994;38:383–92.
[23] Zigmond AS, Snaith RP. The Hospital Anxiety and Depression Scale. Acta Psychiatr Scand 1983;67:361–70.
[24] Spinhoven P, Ormel J, Sloekers PPA, Kempen GIJM, Speckens AEM, Van Hemert AM. A validation study of the Hospital Anxiety and Depression Scale (HADS) in different groups of Dutch subjects. Psychol Med 1997;27:363–70.
[25] Bergner M, Bobbitt RA, Carter WB, Gilson BS. The Sickness Impact Profile: development and final revision of a health status measure. Med Care 1981;8:787–805.
[26] De Bruin AF, Diederiks JPM, de Witte LP, Stevens FCJ, Philipsen H. The development of a short generic version of the Sickness Impact Profile. J Clin Epidemiol 1994;47:407–18.
[27] De Bruin AF, de Witte LP, Diederiks JPM. The Sickness Impact Profile: SIP68 a short generic version: first evaluation of the reliability and reproducibility. J Clin Epidemiol 1994;47:863–71.
[28] Wessely S, Chalder T, Hirsch S, Pawlikowska T, Wallace P. Postinfectious fatigue: prospective cohort study in primary care. Lancet 1995;345:1333–8.
[29] Schmitz U, Saile H, Nigles P. Coping with chronic pain: flexible goal adjustment as an interactive buffer against pain-related distress. Pain 1996;67:41–51.
[30] Deale A, Chalder T, Marks I, Wessely S. Cognitive behaviour therapy for chronic fatigue syndrome: a randomized controlled trial. Am J Psychiatry 1997;154:408–14.
[31] Prins JB, Bleijenberg G, Bazelmans E, Elving LD, de Boo TM, Severens JL, van der Wilt GJ, Spinhoven P, van der Meer JWM. Cognitive behaviour therapy for chronic fatigue syndrome: a multi-centre randomised controlled trial. Lancet 2001;357:841–7.
[32] Sharpe M, Hawton K, Simkin S, Surawy C, Hackmann A, Klimas I, Peto T, Warrell D, Seagroatt V. Cognitive behaviour therapy for the chronic fatigue syndrome: a randomised controlled trial. BMJ 1996; 312:22–6.
[33] Witing P, Bagnall AM, Sowden AJ, Cornell JE, Mulrow CE, Ramirez G. Interventions for the treatment and management of chronic fatigue syndrome A systematic review. JAMA 2001;286: 1360–8.
[34] Moss-Morris R, Sharon C, Tobin R, Baldi JC. A randomized controlled graded exercise trial for chronic fatigue syndrome: outcomes and mechanisms of change. J Health Psychol 2005;10: 245–59.
[35] Sharpe M, Chalder T, Palmer I, Wessely S. Chronic fatigue syndrome: a practical guide to assessment and management. Gen Hosp Psychiatry 1997;19:185–99.
[36] Engel GL. The clinical application of the biopsychosocial model. Am J Psychiatry 1980;137:535–44.
[37] Nielson WR, Jensen MP, Hill ML. An activity pacing scale for the chronic pain coping inventory: development in a sample of patients with fibromyalgia syndrome. Pain 2001;89:111–5.
[38] Van Houdenhove B, Neerinckx E, Onghena P, Lysens R, Vertommen H. Premorbid “overactive” lifestyle in chronic fatigue syndrome and fibromyalgia. An etiological factor or proof of good citizenship? J Psychosom Res 2001;51:571–6.
[39] Ax S, Gregg VH, Jones D. Coping and illness cognitions: chronic fatigue syndrome. Clin Psychol Rev 2001;21:161–82.
[40] Viane I, Crombez G, Eccleston C, Devulder J, De Corte W. Acceptance of the unpleasant reality of chronic pain: effects upon attention to pain and engagement with daily activities. Pain 2004; 112:282–8.