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Cancer survivors' social context in the return to work process: narrative accounts of social support and social comparison information

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Abstract

Purpose: Returning to work is a process that is intertwined with the social aspects of one's life, which can influence the way in which that person manages their return to work and also determines the support available to them. This study aimed to explore cancer patients' perceptions of the role of their social context in relation to returning to work following treatment.

Methods: Twenty-three patients who had received a diagnosis of either urological, breast, gynaecological, or bowel cancer participated in semi-structured interviews examining general perceptions of cancer, work values and perceptions of the potential impact of their cancer diagnosis and treatment on work. Interviews were analysed using the iterative process of Framework Analysis.

Results: Two superordinate themes emerged as influential in the return to work process: *Social support as a facilitator of return to work* (e.g. co-workers' support and support outside of the workplace) and *Social comparison as an appraisal of readiness to return to work* (e.g. comparisons with other cancer patients, colleagues, and employees in other organisations or professions).

Conclusions: Two functions of the social context of returning to work after cancer were apparent in the participants' narrative: the importance of social support as a facilitator of returning to work and the utilisation of social comparison information in order to appraise one's readiness to return to work. The role of social context in returning to work has largely been absent from the research literature to date. The findings of this study suggest that social support and social comparison mechanisms may have a significant impact on an individual's successful return to the workplace.

Keywords: social context; cancer; return to work; social support; social comparison

Introduction

With cancer outcomes improving, returning to work during or following treatment is a realistic expectation, although in some cases a challenge, for many cancer survivors (1-3). Recent reviews have identified factors that can facilitate or impede return to work (defined as a process of becoming ready and able to return to a job), including socio-demographic factors (e.g. age, educational level, household income, marital status, gender); cancer type and treatments received; work-related factors (e.g. work-demands, work characteristics); and psychosocial factors (including social support) (4-7). This process, however, is intertwined not only with the vocational but also with social aspects of cancer survivors' lives. These social aspects of return to work can be defined as the social capital at individuals' workplace (e.g. social support, sense of community, quality of leadership) and its associations with their sustainable return-to-work (8); the support offered from family and friends and the impact of sociodemographic characteristics (e.g. marital status and existing close relationships with others) (9-11). Such social aspects set the context within which cancer survivors manage their return to work and also determine the support available to them (9).

During reintegration into the workplace cancer survivors may rely on workplace support and their employers' willingness to accommodate their needs (5, 12). Workplace support can include emotional support from colleagues, work-adjustments and an employer's flexible approach towards implementing work changes (5, 6). Cancer survivors that perceive inadequate support may feel more vulnerable to the emotional and physical challenges in their workplace (14) compared with other employees. For this reason, available support is important in shaping the way in which patients' evaluate their readiness, to return to work (6, 13). However, emotional support from friends and family can also play a vital role in the return to work process (6).

Previous research has highlighted the importance of addressing the impact that others can have on survivors' return to work (15). In addition, a review of qualitative research identified the role of wider support systems such as support from family, workplace support (e.g. workplace accommodations, a supportive work-environment), and support from

healthcare providers as key factors associated with cancer survivors' successful return to work (15). Furthermore, positive experiences following return to work have been associated with the provision of good organisational (i.e. work adjustments) and interpersonal support (17). The majority of interpersonal support is provided by co-workers, although cancer survivors have reported a preference to receive more support from occupational healthcare personnel (18).

Thoits (19) highlights that social support and social relationships can improve individuals' physical and psychological wellbeing through seven mechanisms: social comparison, social control, role-based purpose and meaning (mattering), self-esteem, sense of control, belonging and companionship, and perceived support availability. Such mechanisms, though, can influence individuals' self-evaluations of their readiness to return to work and their perceptions of support availability. Indeed, perceptions of support are not static and can differ substantially before and after cancer survivors re-enter the workplace (14). It is also important to differentiate between quantity and quality of social support, as high-quality social support can buffer the negative effects of decreases in the quantity of social support (19).

Social context in this study was approached as the context within which patients interact and relate with others in their professional lives (employers and co-workers) and personal lives (other people outside their workplace). In this sense participants' social context consisted of those individuals that interviewees either identified in their narratives as relevant to their perceived social support availability or associated themselves with them through social comparison. The aim of the study was to explore cancer patients' perceptions of the role of their social context in relation to returning to work following treatment.

Methodology

Participants were recruited from five UK hospital sites as part of a larger study examining the feasibility of a randomised controlled trial of *WorkPlan* (a workbook based intervention to support return to work among cancer survivors) (21). All participants included in this interview study had been randomised to the intervention arm of the trial. At the time of recruitment participants were at least two weeks post-treatment initiation and were identified through breast, gynaecological, colorectal, or urological cancer clinics and through multidisciplinary team meetings. Recruitment and study materials were translated into the five most commonly spoken languages (Bengali, Chinese (standard), Polish, Punjabi, and Urdu) in order to improve recruitment of ethnic minority groups among people of working age within the recruitment area, and interpreters were available during interviews, if required (21). However, no patients were recruited into the study who required either translated materials or an interpreter and all interviews were conducted in English. Following completion of the four-week workbook intervention participants were contacted and invited to be interviewed at one of the hospital sites or over the telephone. Participants were approached sequentially until the recruitment target was reached.

The interview schedules in this study encouraged participants to discuss how they felt about an opportunity to create a return to work plan and elaborate on their feelings about returning to work, their goals, and barriers to return to work. Drawing from participants' narratives key themes were constructed that described different aspects of participants' social contexts and how they were associated with their return to work process. The interview schedule was developed through a review of previous research and discussion with a team of health psychologists and oncology clinical nurse specialists. The first part of the interview schedule focussed on how engagement with, and perceived usefulness of, the intervention; the second part focused on general perceptions of cancer, work values and perceptions of the potential impact of their cancer on work. It is the second part of the interview that is the focus

of this study. The schedule was used as a guide, allowing discussion of issues that were important to the participants. Although the interview questions were not tailored to address specifically participants' perceptions of their social contexts, such narratives emerged widely within the interviews as participants were encouraged to talk openly about issues of relevance to them. Interviews lasted on average 69 minutes (range 32 to 132 minutes).

Analysis Plan

Interviews were recorded and transcribed verbatim and accuracy of the transcripts was checked against the original recordings. To maintain anonymity each participant was assigned a code that was chosen by the researcher that performed the interviews' analysis. A "framework" analysis approach (22) was used, which is a flexible approach utilising an iterative process that primarily follows the constant comparison method (23). Following the completion of all the interviews participants' transcribed narratives were analysed by noting relevant units of meaning and creating free codes. Following on from this the free codes were then grouped into coherent themes. Once themes were identified for each participant they were integrated across participants to generate a list of super-ordinate themes that captured the participants' shared experiences.

All transcripts were independently analysed by one researcher and twelve (52%) consecutive transcripts were independently analysed by a second researcher so that different perspectives on the data could be discussed within the research team. Only minor differences in researcher perspective emerged and these were resolved by agreement. For example, narratives about participants' experiences and perceptions of their workplace were coded as "interaction of working and cancer" which was subsequently recoded as elements describing workplace support (employer support and co-workers support).

The process of framework analysis incorporated both a theme-based approach (themes' development across all interviews) and a case-based approach (themes' development per interviewee) from both researchers that were involved in the analysis of the transcripts. All developed themes were discussed within the research team including the study's principal

investigator that was not directly involved in the initial theme development. The framework was further developed to fully reflect participants' narratives, allowing for both a descriptive and abstract approach to the data across all individual cases through the development of comprehensive thematic categories. For example, a descriptive approach to the data included the ways in which social support and social comparison was described within the interviews' transcripts, whereas an abstract approach involved conceptualising the role of social support and social comparison for participants' return-to-work.

Results

Sample characteristics

The sample comprised twenty-three patients (sixteen females and seven males) with a mean age 50 years (ranging from 25 to 65). The majority of participants had received a diagnosis of breast cancer (n=12), followed by urological cancer (n=7), bowel cancer (3), and gynaecological cancer (n=2). At the time of the interview only six participants had already returned to work: five participants with a diagnosis of urological cancer and one participant with a diagnosis of bowel cancer. Over half of the participants were employed in large organisations (over 1000 employees) (N=12), seven were employed in mid-sized organisations (50 to 1000 employees), four participants were employed in small organisations (less than 50 employees) and of these three categorised themselves as self-employed.

Participants' narratives offered both positive and negative accounts of their experiences of their social environment with regards to work. Two superordinate themes emerged that described participants perceptions of their work and social context and the role of social factors in their return to work process. The first theme; *Social support as a facilitator of return to work*, included participants' reflections of the ways in which their social context supported, or hindered, their return to the workplace. Participants' accounts of social support involved perceptions on how being part of a specific social entity (e.g. a

workplace, a social group, a family) and broader community shapes the level and the quality of the support that they perceive has been available to them.

The second theme; *Social comparison as an appraisal of readiness to return to work*, included reflections on similarities and differences between themselves and others in their home or work environments. Within these accounts participants utilised social comparison information to evaluate their readiness to return to work:

“My window cleaner is self-employed but he would really struggle because he drives everywhere and he’s climbing ladders ... whereas me being self-employed doing what I do, it is something that is physically easy to go back to” (P9: Female, Breast Cancer)

Social support as a facilitator of return to work

Participants discussed the influence that their work-environment, family, and broader social environment played in their return to work. The analysis of participants’ narratives provided a description of perceived social support in different spheres of their lives and demonstrated the ways in which this support influenced how they perceived themselves following their cancer diagnosis and influenced decisions around returning to work. Participants reflected on the degree to which their family members and others offered them adequate support and these discussions provided insight into participants’ perceptions of social support from multiple sources including their employers, their co-workers and family and friends. Although they reflected on employers’ willingness to accommodate their needs in the workplace, participants’ social support narratives focused on the support from their co-workers and others. Narratives about health providers and occupational healthcare professionals were not prevalent in participants’ interviews, for this reason they were not included in the findings.

Co-workers’ support

One frequent theme in participants' narratives was their descriptions of the social support that they received from their co-workers. The majority of participants had not returned to work at the time of the interview. However, those that had returned to work gave only positive accounts about the support they received from their co-workers, describing them as "understanding" and eager to show their support (e.g. help with heavy lifting"):

"The people that I worked with were quite willing to do any heavy lifting for me" (P1: Male, Urological Cancer)

"the people you work with are well prepared and are generally very accepting of your inability to do full speed work" (P12: Male, Urological Cancer)

Others offered positive accounts of social support from their co-workers, while they were off work.

"I had other colleagues ringing me up and you see it was all in a positive way, because in my profession, if people are off, theoretically you're not supposed to contact them" (P5: Male, Urological Cancer)

This perceived emotional support from co-workers enabled participants to form positive expectations regarding their imminent return to work and how they would be treated by their colleagues when back in the workplace.

"Everyone's really been supportive...there's no issues in terms of reactions of others" (P4: Male, Urological Cancer)

However, one concern was raised about co-workers' future behaviour, whether they could become overprotective, and what in that case would be the effect on participants' reintegration in the workplace:

"That might be different when I actually get there and I find that maybe people are being overprotective or are deciding not to give me jobs I've actually said I can do." (P16: Female, Bowel Cancer)

Support outside of the workplace

This theme explored perceived emotional support from people beyond the workplace which included their family members that were regarded as their caregivers, their friends and in some cases, encounters with the general public. Positive (e.g. encouragement on participants' work abilities) and negative (e.g. comments which undermined their competency levels) accounts were balanced, which signals that experiences of social support can vary greatly in different spheres of a cancer survivor's life. The theme of "others support" was also found more often in the narratives of female participants. Others' support was perceived as a form of encouragement about participants' work abilities. On the other hand, a lack of others' support was attributed to others' overprotection ignorance that could undermine participants' perceptions of their capability to undertake their roles as part of their return to work process.

"People who would support me were my friends, family, my partner, doctor and manager...When it came to people who were discouraging me again it was friends and family because they would turn around say, "Don't do too much, you can't do that". They would discourage me as much as encouraging me. (P2: Female, Urological Cancer)

Participants' accounts of a lack of support from others included descriptions of being ignored, as well as being treated or perceived differently that made them feel unease towards their prospective return-to-work.

"Others have kind of ignored me, and when they've seen me, they're funny around me. You think, "Dear me, that's a strange..." I'm still here, as such, but they just treat me differently"
(P10: Female, Breast Cancer)

"It is other people who I worked with before. Sometimes when they see me, they struggle to get eye contact with me" *(P43: Female, Gynaecological Cancer)*

Social comparison as an appraisal of readiness to return to work

Another dimension of participants' social context that emerged was the way in which they appraised their return to work progress taking into consideration their health condition following cancer treatment and the characteristics of their work and workplace (e.g. type of work, work accommodations, and employment status). In particular, participants often engaged in social comparison narratives in order to explain their own progress with the return to work process and when reflecting on their current (post-cancer diagnosis) work capabilities.

In their narratives participants compared themselves with other cancer patients, their co-workers, as well with employees in other organisations or professions. These comparisons were largely used as a means for participants to assess their readiness to re-join the workforce, including their ability to compete with others equally within the workplace. Participants also drew comparisons in terms of the degree to which they were supported in their current role and would be able to fulfil the requirements of their work-related role. These insights offer a broader understanding of the relationship between cancer survivors' social context and their employment by illustrating how social comparison processes influence individuals' perceptions of their work capabilities and overall readiness to return to work.

Comparison with other cancer patients

In discussing their readiness to return to work participants made comparisons with other cancer patients reflecting on their experience as a cancer patient that encompassed their current physical health status and the impact that cancer and cancer treatments on their health and energy levels.

“The cancer has not had that big a physical impact on me as it would do for other people so it makes me feel slightly better off than others and more focused in the fact that I can do what I want to do” (P24: Female, Breast Cancer)

“I have been very fortunate. A lot of the guys there are still suffering from their operations ... I think I got away quite lightly, basically” (P19: Male, Urological Cancer)

Some participants expressed gratitude regarding their health status and the type of treatments that were required, although for some this was intertwined with narratives of guilt regarding their better health status compared to that of other cancer patients:

“I would speak to ladies and they’re going, “Oh, I’ve got tingling in my fingers still, from chemo, my legs are all swollen,” and I’d think, “Oh, when will it be me?” so, in a way, I don’t like talking to other ladies, because I feel as if I’ve got to apologise for not having these complaints.” (P10: Female, Breast Cancer)

Comparisons with other cancer patients also revolved around their work conditions or type of work, suggesting that other cancer patients may face greater barriers to working post-cancer diagnosis. This theme was also frequent among male cancer patients as their treatment was such that had allowed them to return quickly back to work.

“You’re trying to help and guide people through where they don’t have or aren’t fortunate enough to be in my position A) with the cancer I’ve got and B) with my employment situation” (P3: Male, Urological Cancer)

“As I say I’m lucky, really lucky. Some of the people I’ve met are struggling and they will struggle...not everybody has got jobs to walk straight into have they, walk back into, and I can’t imagine what it must be like going through this and having to try and find work” (P40: Male, Bowel Cancer)

Comparisons with colleagues

Social comparison narratives of the female participants in this study often focused on how they viewed themselves compared to their colleagues in their workplace. Participants expressed their concerns about changes that have taken place at their work and whether those would also change their status within their work-environment and impact on their ability to keep up with the pace of work.

“I’ve been out of the workplace for so long, I kind of feel like everything will have moved on and left me behind, and it would take a long time to catch up” (P16: Female, Bowel)

“..Being a new girl amongst people that you once did know everything and now you're conscious that you don't know very much. So you go back to being the new girl again.” (P24: Female, Breast Cancer)

The way participants viewed themselves in comparison to their colleagues also included concerns about others’ expectations in their workplace that made them feel apprehensive towards their return-to-work.

“Because I will have been out of it for a good nine months by the time I get to go back. So it’s just not knowing what’s happening while I’m there ...I won’t really be aware of what’s going on fully and people just expect me to come back and just get back into things straightaway. And then the duties that I will or won’t do.” (P30: Female, Breast Cancer)

Comparisons with employees in other organisations or professions

The third theme that described participants’ social comparison included comparisons with the work characteristics and work conditions that they perceived to exist in other organisations or within other professions. This type of social comparison narrative served as a means to demonstrate participants’ readiness to return to work by attributing workability to

the work characteristics of a person's job and the support that is available to them compared to other organisations or professions:

"I can understand if somebody has got a seriously physical job and they've had operations and stuff, it would be difficult. I've just got a desk based job but it has made me think (P24: Female: Breast Cancer)

Interviewees described different characteristics of their workplace that could offer support for their return to work compared with other organisations. Such favourable conditions included having flexibility at work, having financial benefits that allow space for planning and deciding on return to work timing, as well as having a non-physical job and not being required to search for a new job.

"I don't have a physical job so I'm not so affected by that kind of work. I can understand if somebody has got a seriously physical job" (P24: Female, Breast Cancer)

"You're in a very difficult position if you've got cancer and you've got to find new employment ... But you see, some people may be in that position, if someone has cancer and then they've got to go to the job centre, you know, that would very, very difficult" (P15: Female, Breast Cancer)

This was a theme that was found in both males' and females' narratives. However, comparisons with other organisations were not always positive and for some female participants there were potential financial challenges associated with their salary or type of contract:

"I mean at my workplace I don't get pay as you go. Like, if I don't work I don't get paid...With some companies now if you get the salaries so if you're off you may get quarter of

your salary or all of your salary up until a certain time but mine now I'll have to get statutory sick pay which is £80 something a week.” (P28: Female: Breast Cancer)

Discussion

The aim of this study was to explore cancer patients' perceptions of the role of their social context in relation to returning to work following treatment. Interviews were analysed using framework analysis and through its iterative process it was revealed that participants' perceptions of social support and social comparison reflected two distinct functions of the social context of returning to work. In particular, participants' perceptions of social support encompassed how co-workers' support and support outside of their workplace facilitated their return to work process. Furthermore, participants' perceptions of social comparison included how comparisons with other cancer patients, comparisons with colleagues, and comparisons with employees in other organisations or professions helped participants appraise their readiness to return to work.

Social support information and returning to work

Social support narratives offered an insight into how survivors' perceptions of emotional and practical support may facilitate the return to work process. Those narratives included comprehensive descriptions of supportive relationships with employers, co-workers and other key referents outside of work. Having a good relationship with the employer (e.g. job security, sick pay) and keeping in touch with work and colleagues has been shown to have a positive influence on return to work (24). Furthermore, a supportive environment in cancers survivors' personal and professional lives, such as emotional support from colleagues, family, and friends can be beneficial to a successful return to work (16). In particular, interpersonal support in the workplace, including empathy, and, supervisor support and positive co-workers' attitudes can facilitate survivors' return to work process (17, 10).

However, social interactions do not always offer the emotional support that patients' need (24). In the current study, a number of participants described how others' attitudes and behaviours impacted on their work and personal life. Previous research has shown that family members can be overly protective or disapprove of a survivor's decision to return to work (17), which has the potential to be perceived as unsupportive by the patient. Furthermore, there is evidence suggesting that there may be gender differences in the way in which cancer survivors perceive and evaluate social support. In this study, females' narratives illustrated a range of positive and negative accounts of social support, not only from their workplace but from other spheres of their lives. Previous research suggests that females may have greater social support needs for their successful return to work (18) and that social support changes can have a substantial impact on their emotional wellbeing (19). Moreover, gendered constructions have been found to impact on the way in which male patients approach their social and professional interactions (26), for example, cultural expectations of men "being strong" can influence help-seeking behaviours and create barriers to patients' experience of social support (26). Research findings, however, suggest that a closer examination on the social support needs and preferences (characteristics of social support groups, on-line support groups, face-to-face interactions) (27, 28) can improve clinician's understanding on how to best overcome such cultural barriers and offer appropriate guidance and support systems.

Social Comparison information and appraisal of readiness to return to work

The second function of participants' social context that emerged from the analysis of participants' narratives was the use of social comparison information as a means to appraise one's readiness to return to work. In our study, such narratives of social comparison information showed how survivors compare themselves with others as a means to appraise the progress they have made towards returning to work and what their current readiness to return to work may be. Our analysis highlighted three different types of social comparison narratives: comparison with other cancer patients, comparison with colleagues, and comparison with other work-contexts. In particular, participants compared their health status

to that of other cancer patients; comparing themselves and their work-capabilities with their colleagues; and comparing workplace support and work characteristics with other work contexts. In most of the cases, those comparisons were used to indicate survivors' positive health status and readiness to work. However, there were also cases in which social comparison information was used to indicate a negative evaluation of one's readiness to return to work. This is in accordance with previous research suggesting that cancer survivors seek social comparison information in order to make sense of their condition (30, 31) and feel better about themselves (32, 33).

Social comparison information allows individuals to view themselves and their lives relative to others' experiences (34). Social comparison mechanisms in cancer survivorship can impact on individuals' self-esteem and self-evaluations (35-36). For example, cancer survivors that use downward comparisons, comparing themselves with others that are in a worse situation, may feel better about themselves (36), although evidence also suggests that downward comparisons may be even detrimental among cancer survivors with positive health expectations (37). However, social comparison information was also used by participants as a means to situate themselves and their work-capabilities in their work-context and job market, comparing themselves with their colleagues or other work contexts. The purpose of such comparisons is to gather relevant information from similar others that can allow individuals to 'place' themselves within their contexts (38). Examinations of social comparison information in the autobiographies of adult cancer survivors (39), among peers (40), and in cancer support group programs (33) have shown the significance of social comparison information in regulating survivors' feelings and reactions.

Previous research also suggests that there may be gender- and cancer-type differences in the way in which survivors perceive their overall readiness to return to work and the way in which they experience work after cancer (41, 42). Participants that attributed their readiness to return to work to having a "better" and "easier" cancer experience compared to other cancer patients were among the ones that had already returned to work. The fact that individuals, whose recovery had allowed them to return to work, felt the need to provide such

explanations also demonstrates that social comparison information per se may not always improve survivors' self-evaluations (37).

Women with breast cancer expressed their concerns about their readiness to return to work by comparing themselves with their colleagues. This is in line with previous qualitative research that has shown that breast cancer patients can feel uncertain about their work-capabilities and acceptance on returning to the workplace (43). A longitudinal study of fifty-five gynaecological cancer survivors showed that they often experienced low confidence in their ability to perform in the workplace (44). Furthermore, the type of treatment and its effects can also explain the observed differences in participants' narratives as urological cancer patients recovering after surgery or brachytherapy have the fastest return to work rates compared with other cancer-types that require more extensive surgery or radiotherapy (45-47, 40). Finally, both male and female participants addressed their readiness to return to work by comparing their work support and work characteristics with those that may exist in other work contexts or organisations. Such findings are in line with previous research demonstrating that employee benefits, large company size, and non-manual work are associated with a faster return to work (48, 49).

None of the participants in this study raised concerns about cognitive and concentration issues. Previous research indicates that cognitive side-effects of cancer treatment may persist following treatments such as chemotherapy or androgen deprivation therapy. The absence of such narratives can be viewed as a form of a bias, especially with regards to the way in which patients view themselves in comparison to others. An explanation may be that at the time of their interviews the majority of participants had not yet returned to work and, consequently, had not yet experienced the actual impact of the side-effects of their treatment in their daily work-lives.

One limitation of this study is its small sample size which prevented analysis based on other background characteristics (e.g. type of employment, industry, socioeconomic background). A better understanding of cancer survivors' social context and their return to work process should take into consideration the impact of social, structural, and economic

factors (50). A further limitation of this study is that it does not incorporate cancer survivors' perceptions of their interactions with healthcare providers and occupational health professionals and the degree to which they felt supported by them. Future research could focus on mapping those sources of emotional and practical support within survivors' social contexts. In addition, future research exploring social support and use of social comparison information among cancer survivors should also address factors such as type of treatment, ethnic background, and gendered constructs among lesbian, gay, bisexual, and transgender cancer survivors.

Previous research has shown that social interactions and relations within workgroups can change when a worker re-joins the group after being off sick (51). The findings of this study have a number of important implications for cancer patients and those individuals supporting them. In particular, this study suggests that social support and social comparison mechanisms may have a significant impact on individuals' successful return to work. A review of the effectiveness of social support interventions has shown that support provided from one's peers, friends and/or family members can be beneficial for the individual, particularly when there is a good match between the type of intervention and the target population (52). In addition, behaviours modelled by one's supervisor, as well as co-workers' values and pre-existing relationships, can impact on the degree to which social support may be available in the workplace after return to work (53). Thus, interventions focusing on the process of cancer survivors' reintegration in the workplace should also take into consideration the social interactions in survivors' lives, their role, and the processes through which they can impact on their return to work.

Compliance with Ethical Standards

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Disclosure of potential conflicts of interest

The authors declare that they have no conflict of interest.

Research involving human participants and/or animals

All procedures performed in studies involving human participants have been approved by the appropriate research ethics committee (institutional and national) and have been performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all patients for being included in the study.

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