Pilot Study of Insomnia Prevalence in Cancer Survivors

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Pilot Study of Insomnia Prevalence in Cancer Survivors

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Abstract

The increasing number of cancer survivors forces professionals to deal with new symptoms such as insomnia or other sleep disturbances (SD). This study aimed to determine the prevalence and type of SD in a population of cancer survivors.

METHODS: Eligible patients treated with curative intent and followed a minimum of 4 years without recurrence. A cross sectional study was conducted over two months. Eligible patients if referred spontaneously insomnia. We collected socio-demographic, pathological and sleep related data.

RESULTS: 42 eligible. 54% conciliation insomnia followed by maintenance insomnia, early morning awakening and multiple awakenings.

Breast followed by colon cancer in women and gastrointestinal cancers followed by lung and prostate in men.

67% referred intrusive thoughts about cancer such as fear of relapse as the main cause. 57% referred morning fatigue and lack of energy.

CONCLUSIONS: A significant number of cancer survivors present insomnia mostly related to intrusive thoughts of fear to recurrence which impacts in his life due to fatigue and lack of energy. It would be important an early detection to establish the necessary measures for its control.

Introduction

Cancer seems to be an epidemic disease in this century with an increasing incidence. One third of the United States population will develop cancer at some point in their life. Prostate and breast cancers will be the most common in men and women respectively (1).

Advances in oncological therapies have reduced the mortality but longer survivors must cope with their diagnosis, treatments and complications while maintaining their social and family roles (1).

This fact forces professionals to deal with the new symptoms. Among these sleep disturbances (SD) seem to be one of the most important according to the frequency and the impact on the performance status and quality of life of these patients (2,3).

To date few studies have assessed the SD etiology or consequences in this population (4). However, several have addressed the quality of life and concluded that SD are key factors predicting its decline. This fact highlights the importance of a rapid onset of an effective treatment (5,6).

According to the second edition of the International Classification of Sleep Disorders (ICSD-2), published by the American Academy of Sleep Medicine in 2005, SD are classified into eight main categories (7). In all categories insomnia is recognized as one of the most prevalent and distressing symptoms for these patients although the pathophysiological process underlying this symptom is not yet definitely known. It usually has a multifactorial origin related to both psychological factors (such as anxiety and depression), medical factors (symptoms such as pain or toxicities related to chemotherapy) and patient behavioral factors such as the decline in daily activity, bed-bound time which is often longer than in the general population (8).

The main types of insomnia in these patients are longer time to conciliate sleep (over 30 minutes), difficulty staying asleep (waking more than twice per night), waking up too early and increased sleepiness over daytime (9).

In various studies the prevalence of these disorders varies widely though rates are always higher in patients with cancer compared with the general population or control groups (10-14).

This variability can be detected due to differences in the methodology used to assess subjective SD or the different characteristics of the populations evaluated (15).

The study conducted by Davidson et al found a prevalence of 32% in a diverse group of more than 1000 cancer patients (16), while the figure rose to 63% in a sample of 97 patients with breast cancer (17). Generally SD affect 30-50% of cancer patients while only 20% of the general population presents the symptoms (18,19).

Most studies have evaluated SD in patients under active treatment. Our study aims to describe the prevalence and types of insomnia in a cancer
survivors population at the 4th year after the diagnosis.

Methods

We conducted a descriptive cross-sectional study of heterogeneous cancer patients treated with curative intent and followed for a minimum of 4 years without evidence of tumor recurrence. The data collection was carried out over 2 months. The patient was evaluated in a scheduled revision. Only those patients who spontaneously referred insomnia were included. But those who were already taking sleeping pills prior to consultation were excluded.

Demographic data, cancer type, oncological therapies received were collected. The sleep characteristics such as conciliation insomnia, maintenance insomnia, early morning awakening, multiple awakenings (≥ 4) were recorded.

To carry out our study all the parameters were defined as described in Table 1.

The patients were eligible if the insomnia was repeated for at least 4 days/week in the previous month.

Results

42 patients were eligible out of 98 who met the eligibility criteria (43%). 24 women, 18 men. Most of them (54%) referred conciliation insomnia. 18% complained of maintenance insomnia, early morning awakening (16%) and multiple awakenings (more than 4 times) (12%).

76% of the women had breast cancer, followed by colon cancer. In men 65% had gastrointestinal cancers followed by lung and prostate.

When asked for the possible causes, 67% referred intrusive thoughts about cancer such as fear of relapse. None of the patients though that this could have been a residual effect of the cancer therapies. 33% of them were worried about their job, financial situation or family.

57% of these population referred morning fatigue and lack of energy.

Discussion

Our study, though being a small pilot study, shows that conciliation insomnia is a frequent symptom in cancer survivors which impacts in patients’ life in form of fatigue and lack of energy.

Different studies have shown great variability in the prevalence rate of this disorder in cancer patients, ranging between 30-50%, though some studies have found much higher figures (18,19).

These discrepancies are considered to be due to the different methodologies used in the evaluation and the characteristics of the populations studied or even the sample sizes used (18,19).

In our study, the overall number of SD can be considered within the range of variability already published (43%) although the sample size is very small and so it is not possible to obtain more conclusive results.

Most of our patients (54%) referred conciliation insomnia followed by those complaining of maintenance insomnia, early morning awakening and multiple awakenings (more than 4 times).

Though it was not the aim of this study, we found that 57% of these patients complained of fatigue and lack of energy in the morning which were considered related to the insomnia. Others such as Ancoli-Israel et al suggested that poor sleep was a factor related to asthenia, anemia and metabolic disorders in cancer patients (20). In addition, Davidson et al revealed that patients who reported insomnia also had physical, emotional, concentration problems and difficulty handling stress, which negatively impacted both in their quality of life and in the intensity of the insomnia (21).

All these data make us think about the relevance of the insomnia in cancer survivors and so an awareness of this problem is necessary to initiate an early treatment to ensure effective control and restore a normal life as soon as possible.

Conclusion(s)

A significant number of cancer survivors present insomnia mostly related to intrusive thoughts of fear to recurrence which impacts in his life due to fatigue and lack of energy. It would be important an early detection to establish the necessary measures for its control.

References


Illustrations

Illustration 1

Table 1: Definitions considered for our study (Modified from American Academy of Sleep Medicine (9):

<table>
<thead>
<tr>
<th>Conciliation insomnia</th>
<th>Problems getting sleep (&gt; 30 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance insomnia</td>
<td>Difficulty falling asleep after the first awakening (&gt; 60 minutes)</td>
</tr>
<tr>
<td>Early awakening</td>
<td>The patient wakes up early (at least 120 minutes earlier than usual)</td>
</tr>
<tr>
<td>Multiple awakenings</td>
<td>≥ 4/ night</td>
</tr>
</tbody>
</table>
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