REPERCUSSIONS OF SLEEP APNEA SYNDROME ON THE PATIENT'S SPOUSE AND FAMILY

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ABSTRACT

Sleep disorders may jeopardize many features of the quality of a patient's life, however there is not sufficient information regarding the impact that a variety of sleep disorders may have on the patient's matrimonial life and on the relationship with his relatives. Sleep apnea is a common disorder that results in different challenges on conjugal and family relationships. Patients who have obstructive sleep apnea tend to present a high incidence of severe psychosocial disruption in their lives, involving the family, social interactions and work situations. Married patients have significantly more depression and are socially more isolated than divorced ones. The aim of this communication is to discuss the repercussions of sleep obstructive apnea syndrome in the patient's relation with his family, since this syndrome generates a tension that is extensive to the conjugal and family unity, interfering with social activities as well as with the harmony of the couple at bedtime.

Key words: sleep apnea, family, conjugal life, sleep disorder

INTRODUCTION

Sleep disorders may compromise many features of the quality of a patient's life, including physical well-being, mental health, security and work performance (Shapiro & Dement, 1993; Young et al., 1993). There is not sufficient information regarding the impact that the variety of sleep disorders may have on the patient's matrimonial life and on the relationship with his relatives, in spite of the marital partner providing valuable clinical information are provided by the spouse report concerning the manifestations and treatment of the patient (Cartwright & Knight, 1987; Wiggins et al., 1990; Garcia López et al, 2000).

Sleep apnea, a common sleep disturbance, yields to different challenges for conjugal and family relationships.

Literature points out that in partners of patients with Obstructive Sleep Apnea/ Hypopnea Syndrome (OSAHS), sleep disturbances cause a rather major impact on conjugal life (Shapiro et al. 1999).

OBSTRUCTIVE SLEEP APNEA SYNDROME

According to the definitions of the American Academy of Sleep Medicine (1999), Obstructive Sleep Apnea-Hypopnea Syndrome (OSAHS) is characterized by recurrent episodes of partial or total obstruction of the upper airways during sleep. It is manifested as a reduction (hypopnea) or complete cessation of the airflow, in spite of the maintenance of respiratory efforts. The Index of Apnea and Hypopnea (IAH) is the most frequent measurement used to characterize respiratory sleep disturbances.

Clinically, the IAH is used as a classificatory criterion of OSAHS severity (American Academy of Sleep Medicine, 1999) and as a score of mortality (He et al., 1988). In the research field, this index is used to describe the distribution of the population presenting respiratory sleep disturbances (Young et al., 1993). The absence of a universally accepted cut off score to define OSAHS in the cause of the limitation for the use of IAH. Values such as five (Young et al., 1993; Young et al., 1997; Young et al., 1996), ten (Flemons et al., 1994), 15 (Engleman et al., 1997), 20 (He et al., 1988) or 30 events per hour of sleep (Redline et al., 1998) have been proposed. Studies on diagnostic methods of OSAHS are difficult to compare when different cut off score values of IAH are used. In spite of the little clinical relevance to define this value, differences in sensibility and specificity measurements appear when using IAH in research. In this way, the American Academy of Sleep Medicine (1999) standardized the cut off score of five events per hour of sleep, above which the nocturnal respiratory events, including apneas, hypopneas and respiratory event-related arousals, might be associated with morbid consequences of OSAHS.

In accordance with a variety of population statistics, the OSAHS presents an incidence situated between 1% and 10% of the general population. This difference is due to the fact that OSAHS increases considerably with age. The peak of the major incidence occurs between 40 and 50 years, although it can as well be present in children and in elderly individuals (Bearpark et al., 1991; Lavie, 1983). Among the pathologies studied in sleep laboratories, OSAHS occurs in approximately 30% of the cases and presents a pronounced predominance for the masculine gender, with the relation of man:woman being 10:1, and a certain familiar predisposition (Coleman et al., 1982).

The clinical symptomatology observed in OSAHS patients shows a particularity of manifesting itself during sleep, as apnea and snoring, and causes diurnal somnolence. These symptoms can alter the diurnal behavior. Snoring, one of the main symptoms of OSAHS patients, has an incidence of 95% of the cases. It is more frequently apparent in the male gender, and its intensity increases with age and excessive weight (Bonnet et al., 1978; Carskadon & Dement, 1981; Davila et al., 1994). The noise, which is mainly inspiratory, is caused by vibrations of the oropharynx soft tissue and reflects the existence of an obstruction of the superior airway. In OSAHS patients, snoring is cyclic and intermittent. Between partners, the increased intensity of the noise level is the main reason for the sleeping in separate rooms.

Nocturnal sleep of OSAHS patients is a restless one, occasionally associated with periodic leg movements, abrupt movements and the twitching of hands and feet. As a consequence, the excessive diurnal somnolence causes the patient to sleep easily in public places, such as churches and waiting rooms or in monotonous situations such as reading or watching television. In case of an intense

somnolence, the patients may end up sleeping while driving, and cause automobilist accidents (Findley et al., 1988).

In addition to the constant sensation of tiredness and weakness, the OSAHS patients may present difficulties of concentration and impairment of memory as well as of reasoning. Personality changes have been described, such as aggression, rage attacks, irritability, anxiety and depression (Yesavage et al., 1985). A decrease in libido and impotence has been observed in 20% to 40% of the OSAHS patients (Guilleminault, 1989).

The therapeutic approach for these patients consists of general measurements on one hand, such as weight loss, avoidance of hypnotic medication or alcoholic drinks around bedtime; and specific measurements on the other hand, such as use of devices that provide permeability of the upper airway, including oral appliances (Thorpy, 1995), CPAP (*Continuous Positive Airway Pressure*) (Sullivan, 1989) and, in some cases, surgical treatment.

FAMILY, THE COUPLE AND FAMILY STRUCTURE

The family provides a natural environment for growing and receiving support. It plays a role of warranting the feeling of belonging and, at the same time, promotes the individualization of the human being (Minuchin, 1993). The family is an active system under constant transformation, a complex organism throughout the time, with the purpose of guaranteeing the continuity and the psychosocial development of its members. In addition, it comprises the relationships and events related to the natural evolution of the group, showing how the family reacts to them, how each member faces these changes, and the significance of external and internal events for the group.

The family can be considered as the principal perpetuating agent of the belief in the existence of an external reality, independent of the observer, since reality is a concept based on individual experience. Only through the contrast reality is built, considering that context is what gives meaning to life (Bateson, 1986). The systemic concept will enrich us with the perception of circularity between the family elements and the social elements. It also demonstrates that each one has its own role and responsibility in the maintenance of the social dynamic and present family and, therefore, in mental health or illness of its members.

Throughout history, the family has represented an institution capable of fulfilling the basic functions to which it is destined, meaning to bring up, feed, educate, transmit security and protect its members as well as to bring forth and socially adapt new and well established personalities (Seixas, 1992). The personal development is considered an important cultural and therapeutic value, and the relationship of the marital couple can act as an essential factor to obtain this development.

Epidemiological data (Schepank, 1987; Kocher, 1985; cited in Willi, 1995) point out that married people are in better conditions

than divorced ones or widows, when considering mortality, psychic or somatic disturbances, psychosomatic illnesses, drugs use, alcoholism, immune defense, prevalence of infarcts, cancer and suicide. In terms of satisfaction with life, professional dedication and successful married people show better results than single ones. It is within the marital relationship that certain needs are satisfied. The pathology is found when the partners can no longer mutually satisfy these necessities, or when immature expectations are no longer attended or considered by one or both sides (Skynner, 1979).

In a marriage, the partners are connected by a common history, in which each one's is influenced by the other's behavior. The marriage does not solely respect the interpersonal links between two people, but merely all contexts in which marital partners are involved. In case of sickness of one partner, the marital system tends to become dysfunctional, with a disturbance in the family homeostasis, locating the entire family context into a situation of stress. Stress is understood as an unbalance within the organism when dealing with the environmental influences. When present in the family environment, stress creates favorable situations for the appearance of certain symptoms (Carter, 1982).

Living organisms are characterized by stability, while auto-organized systems are profoundly dynamic, and submitted to continuous, multiple and interdependent fluctuations. In order to be healthy the system must be flexible. Therefore health is an experience of well being, resulting from a dynamic balance that involves physical and psychological aspects of the organism, and also its interactions with the social environment. In order to be healthy, an organism must preserve its individual autonomy but, at the same time, it must be capable of harmonically integrate itself in more extensive contexts. This integration is intimately linked with the concepts of flexibility and dynamic balance. Sickness is therefore a consequence of unbalance and dissonance and can very often be seen as a result of lack of interaction (Capra, 1999). Transitory stress is inherent to life, since the continuous interaction between the organism and the environment involves temporary losses of the inner balance. Therefore, pathological, prolonged or chronic stress can be destructive and represents a substantial issue in the course of illnesses (Levine and Ursin, 1991).

The medical approach to the patients should include the overall system in which the individual and his illness are inserted, as well as his current stress situations. The approach should also focus on recovery of the harmony between partners, and reorganization of the system (Minuchin, 1982).

THE OSAHS PATIENT IN THE FAMILY CONTEXT

According to Kales and colleagues (1985), patients who have obstructive sleep apnea of sufficient severity present anxiety manifestations, cognitive impairment, besides mild to severe deficits in terms of thinking, perception, memory, and communication. The

authors also described that these patients exhibit difficulty to learn new information, resulting in a trend to distraction and irritability. Another finding was the high incidence of patient's reports of frequent, severe psychosocial disruption in their lives, involving the family, social interactions, and work situations. The repercussions of OSAHS on the spouse are evident, just as the beneficial effect of CPAP in terms of quality of life and sleep for the patient and the partner (Mac Ardle et al., 2001).

Beninati et al. (1999) studied 10 married couples in which 1 member was undergoing polysomnography to evaluate suspected OSA, and their spouses underwent simultaneous to polysomnography. Midway through the 1-night study, the patients received CPAP with the pressure adjusted to eliminate snoring and obstructive breathing events. The results showed that elimination of snoring and OSA in these patients was associated with an improvement in the quality of their bed partners' sleep, as indicated by improved sleep efficiency and index arousal. Kiely and McNicholas (1997) obtained similar results.

Cartwright and Knight, (1987), interviewed the wives of 10 male OSAHS patients, by means of Social Adjustment Scale (SAS) and Marital Satisfaction Inventory (MSI). The data were compared with those from a sample of seven age- and OSAHS severity-matched divorced patients. The married patient group were significantly more depressed and socially isolated than the divorced ones. The spouses of both groups showed poor adjustment in the marital and social/leisure areas, and both groups of patients also showed poor adjustment in their parental role. This study shows that marriage do not necessarily represent social support but appear to be an additional challenge for OSAHS patients.

The family and marital relationships of OSAHS patients can be compared with the behavior of the alcoholic family, taking into consideration that this illness causes stress in the marital union and in the family, interfering with social relations in general. In this context, it becomes evident the need of assistance groups for relatives and especially wives of OSAHS patients.

Concluding, when approaching OSAHS patients, not only the clinical situation should be taken into consideration, but also the relationship with the family, since OSAHS creates a tension that is extensive to the conjugal and family unity, interfering with social activities as well as with the harmony of the couple at bedtime.

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