

Sleep Disorders in Older Adults and Elderly Following the Catastrophic Stressful Life Events

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Abstract: In this paper we will discuss on sleep disorders in older adults and aged people following the catastrophes and stressful life events, and then note very shortly some treatments. Sleep disorders, accompanied with headache, have been known throughout the history of humanity and traditional medicine. In our time, diverse psychosocial and environmental factors such as wars also some psycho-socio-political events, acts of terrorism and others have shocked the world with numerous material, human, damages and victims. Many of these catastrophic acts and stressful life events, with their pathological effects, can bring consequently anxiety and depression. Sleep disorders and insomnia resulting from anxiety and depression, are very common, underdiagnosed, and become a significant source of major pain complaints in older adults and geriatric population. Some modifications in sleep patterns, during normal ageing process, as well as in retired people, may not be considered a part of pathological process of ageing; however, some factors like psychosomata problems, death of spouse or loss of a child or other dear member family etc. can be related to pathological processes, and produce disturbances in circadian rhythm and consequently lead to sleep disorder. Based on his teaching experiences and clinical observations at Mental Health Centres, as well as theoretical studies (particularly during these three last decades) the author presents the results of his clinical researches. Our studies and lectures in University Hospitals: (Ste Anne, Lariboisière and La Salpêtrière) have enriched this research. The experiences and researches have shown that anxiety and depression exert pathological effects, not only on the cognitive system as noted elsewhere and harmful influences on the cardiovascular system, but have also pathological effects on the pineal gland and its “melatonin” hormone secretion which is considered as stimulator system (pace-maker-like) to regulate the rhythm of wake-sleep. Major depression, anxiety and trauma, resulting of catastrophic stressful life event, such as wars, acts of terrorism or others, when accumulating and occurring together, can perturb not only the circadian rhythm system, but in some extreme situations (such as inability to cope with stress or suffering, facing economic crisis and failure etc.) in some cases as noted elsewhere, they can also engender behaviour and personality disorders and finally lead to suicide. Concerning current treatments, the efficacy of melatonin to improve the quality of sleep is well established however the author would propose if possible, to maximize the dosage.

Key words: Sleep disorders, post-traumatic stress disorder, melatonin, pineal gland, treatments.

1. Introduction

In this paper the author will discuss on sleep disorders in older adults and aged people following the catastrophes and stressful life events, and then note very shortly some treatments.

Sleep disorders and insomnia, sometimes accompanied with headache, have been known throughout the history of humanity and traditional medicine. In our time, diverse psychosocial and environmental factors such as wars (ex. Iran Irak,

Israel. Palestine), also some psycho-socio-political events, or changing political regimes (ex. Ir. Islamic revolution etc.), acts of terrorism (New York, Paris, Nice, London ...) and others known, have shocked the world with numerous material, human damages and victims. Many of these catastrophic acts and stressful life events (natural and human) with their pathological effects, can bring consequently anxiety and depression (Fig. 1). Sleep disorders and insomnia resulting from anxiety, in some cases from major depression and terror as observed), are very common, under-diagnosed, and become a significant source of major pain complaints: headache or other

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psychosomatic disorders in older adults and geriatric population. Some modifications in sleep patterns, during normal ageing process, as well as in retired people, may not be considered a part of pathological process of ageing; however, some factors like psychosomatic problems, death of spouse or loss of a child or other dear member family etc. (Fig. 1) can be related to pathological processes, and produce disturbances in circadian rhythm and consequently lead to sleep disorder.

2. Material and Methods

Based on his teaching experiences and clinical observations at Mental Health Centers, as well as theoretical studies (during these three last decades), the author presents the results of his clinical researches on the subject of his paper. Our studies and lectures in University Hospitals: Sainte Anne, Lariboisière and La Salpêtrière have enriched this study research.

The experiences and researches have shown that anxiety and depression exert serious pathological effects, not only on the cognitive system as noted

elsewhere [1, 2] and harmful influences on the cardiovascular system, but also have pathological effects on internal organs, such as the pineal gland (“épiphyse”) and its “melatonin” hormone secretion which is considered as stimulator system [3] (pace-maker-like) to regulate the rhythm of wake-sleep.

Major depression, anxiety and trauma, resulting from catastrophic stressful life event, such as wars, acts of terrorism (New York, Nice and Paris), or others (Fig. 1) mentioned above, when accumulating and occurring together, can perturb not only the circadian rhythm system (Fig. 2), but in some extreme situations (such as inability to cope with stress or suffering, facing economic crisis and failure etc.), in some cases as noted elsewhere [4] they can also engender behavior and personality disorders and finally lead to suicide.

Concerning the treatments of sleep disorders and insomniac persons, particularly older adults and elderly, in this paper we have discussed briefly that current treatments including generally benzodiazepines, also some antidepressants (paroxetine or others) and

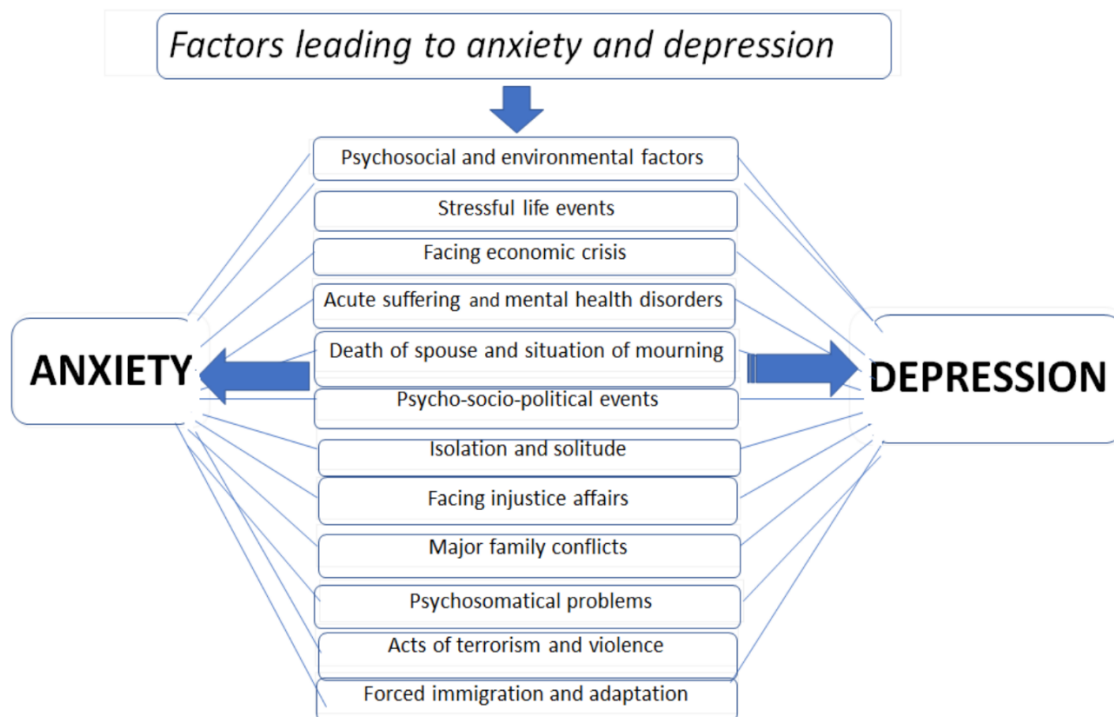


Fig. 1 Factors leading to anxiety and depression.

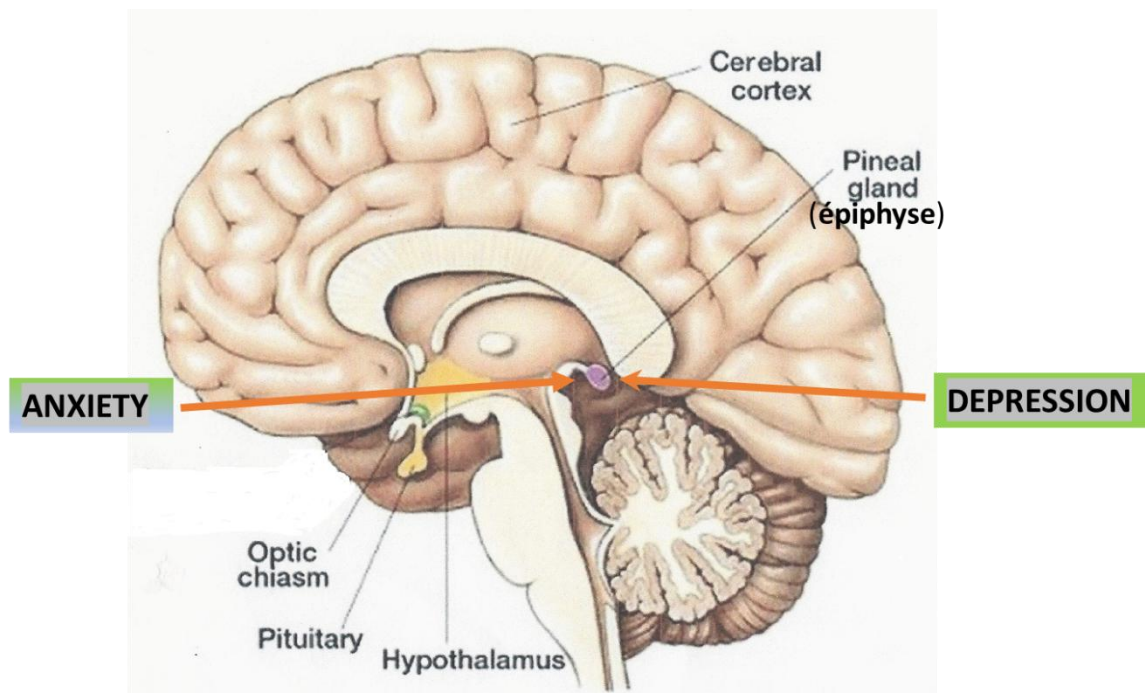


Fig. 2 Pineal gland (epiphysse) secreting the melatonin “sleep hormone”.

tranquillizers which were noted elsewhere [5-7] in spite of their side effects as known, can reduce relatively depression and anxiety, so lightly improve the insomnia. However, our clinical experiences and observations (especially during the two recent decades), showed that the melatonin (N-acétyl-5-méthoxytryptamin) secreted by pineal gland (Fig. 2), considered as “hormone du sommeil” which certain authors [Lemoine P. et al, 8] have also noted, plays an important role in ameliorating sleep disorders and producing quality of sleep.

Psychophysical study researches have also shown that, in parallel of medicinal and pharmacotherapy for the sleep disturbance, the use of sport and regular exercises: physical and mental activities [9] or some other positive occupations: music, TV etc. can play also a role in reducing, or at least limiting depression and anxiety. In plus, we do not deny that family care, sleep hygiene, healthy diet, favorable life conditions, local hygiene, relaxation techniques and different massages, also have all an effective role in the health of people suffering from depression and insomnia.

The efficacy of melatonin to improve the quality of

sleep is well established, nevertheless the author would propose if possible, to maximize the dosage.

3. Conclusion

Our theoretical and empirical researches with clinical experiences and observations have evidently shown that anxiety, stress, depression and other mental disorders resulting by some factors as mentioned (Fig. 1), are among the determining causes of pineal gland melatonin perturbation (Fig. 2), so, consequently leading to insomnia and sleep disorders. About the treatment, as we have noted briefly, the drug intervention with collaboration of sleep specialist in one side, and family care, with presence of social workers and a clinical psychologist in other side, will be efficacious. Finally we do not hesitate to add that the use of melatonin and valerian is well established. It is certain and we observed clearly that in our time, anxiety, depression, trauma etc. resulting from the factors and other reasons mentioned above (Fig. 1) in this study research, are very frequent in the world, but alas and unfortunately we have to say there is likelihood that this frequency, because of diverse

occurrences of catastrophes: wars, violence etc. (Fig. 1) [10] will increase in the future.

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