

If you live with psoriatic disease, you may already know that sleep disturbances are a common and frustrating part of the experience. But why exactly does sleep get affected by autoimmune conditions like psoriasis and psoriatic arthritis? Understanding this can help you manage symptoms better and improve your quality of life.

The immune system's role in sleep

Autoimmune diseases occur when your immune system mistakenly attacks your own body's tissues. This leads to chronic inflammation as your immune cells release substances called cytokines to fight what they perceive as threats. Unfortunately, these cytokines, including interleukin-1 beta (IL-1 β) and tumour necrosis factor-alpha (TNF- α), can interfere with normal brain functions controlling sleep.

Research shows that these inflammatory cytokines influence the brain circuits that regulate your sleep-wake cycle, often increasing sleepiness initially but also causing fragmented and less restful sleep overall. In psoriatic disease, ongoing inflammation could contribute significantly to this disruption, making it harder to get restorative sleep.

Direct effects

Some autoimmune conditions, especially neurological ones, directly affect areas of the brain that control sleep. For example, autoimmune attacks on the hypothalamus, a brain region crucial for balancing sleep and wakefulness, have been documented in conditions like narcolepsy. While psoriatic disease primarily involves the skin and joints, systemic inflammation may still indirectly impact neurochemical systems governing sleep.

Amplifying sleep problems

Fatigue, the overwhelming exhaustion common in autoimmune diseases, is closely linked to poor sleep but also stems from other factors. Chronic pain from joint inflammation can make falling and staying asleep difficult. Additionally, the stress of managing a chronic illness further disrupts sleep patterns by activating hormonal pathways (like cortisol release) that interfere with sleep quality.

A vicious cycle

Sleep deprivation itself worsens inflammation and immune system imbalance, leading to a feedback



loop. Poor sleep can heighten inflammation in your body, potentially worsening psoriatic symptoms. This means improving sleep is more than comfort; it can be a critical part of managing the disease effectively.

What can help?

Managing sleep disturbances in psoriatic disease involves addressing inflammation with appropriate treatment, practising good sleep hygiene, managing pain effectively, and reducing stress. In some cases, healthcare providers may explore therapies targeting inflammation to help improve sleep quality.

Summary

Sleep problems in autoimmune diseases like psoriatic disease occur because inflammation from the overactive immune system disrupts the brain's sleep regulation, worsened by chronic pain and stress. This creates a cycle where poor sleep promotes more inflammation, affecting disease outcomes. Understanding this interplay highlights why addressing sleep is essential in overall disease management.

References

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