

Introduction

The National Institute of Health estimates that 10 million Americans suffer from a Temporomandibular Disorder (TMD). TMD is a disorder of the temporomandibular joint that disrupts the normal function of the muscles, bones, and soft tissue, causing facial pain. Common symptoms include, difficulty chewing, limited opening, clicking, locking, and pain surrounding the temporomandibular joint. TMD is commonly treated through pharmacotherapy, occlusal splinting, behavior modification, and physical therapy. While these traditional treatment modalities can provide relief, they often have their limitations. One emerging therapy for the TMD patient is the use of transdermal cannabidiol (CBD) therapy. Patients can use this transdermal CBD topical skin cream exclusively for pain relief or as adjunctive therapy by combining it with an occlusal splint.

Occlusal splints are widely used to treat TMD. They protect the dentition from occlusal wear by absorbing and dispersing the forces of bruxism, which is particularly important in cases of periodontal disease and dental implant preservation. While occlusal splints prevent damage, they typically will not stop a patient from bruxing or clenching. Transdermal CBD therapy can serve to relieve pain and muscle spasm related to this hyperactivity of the masticatory muscles.

Transdermal CBD therapy consists of massaging a topical skin cream, containing the CBD, in the areas of the masseter and temporalis muscle, as well as to the preauricular area superficial to the TMJ. Holistic Health Therapeutics' TRC Cream (2.5% transdermal cannabidiol) is a professionally formulated CBD cream containing a higher concentration of CBD. This renders it more effective in penetrating the skin and reducing muscle soreness than over-the-counter creams available in retail stores. A distinct advantage of this CBD cream is that it can be applied as frequently as needed, especially during the day when an occlusal splint is not usually worn.

This provides the patient with a better result from a traditional night guard alone. Transdermal CBD cream may be used as an additional treatment modality or as a substitute treatment modality in the relief of pain associated with TMD. This may avoid the use of non-steroidal anti-inflammatory drugs (NSAIDs), tricyclic antidepressants (TCAs) or even narcotic analgesics in more severe cases.

Recent research shows that transdermal CBD, a known non-psychoactive cannabinoid, has efficacy in diminishing pain and inflammation through pro-neurogenic effects and by reducing pro-inflammatory cytokines. These studies have demonstrated that transdermal CBD has long-lasting therapeutic effects without psychoactive side-effects. Transdermal CBD is safe and offers a relatively benign pharmacological method of treatment.

Patient Use

I have found that using Holistic Health Therapeutics' TRC Cream (2.5% transdermal cannabidiol) in combination with occlusal guard therapy has been tremendously helpful in reducing TMD symptoms. **Patients are instructed to massage a small amount of transdermal CBD cream onto the area of discomfort**, which typically involves the body of the the masseter muscle.

TRC cream may be utilized for in-office visits as well. For patients with limited opening, discomfort upon staying open or post-operative discomfort during long treatment visits, TRC Cream can be applied at the time of their visit, sometimes with the additional use of a mouth prop.

Furthermore, TMD symptoms are frequently episodic and vary in both intensity and duration. TRC cream has proven to have beneficial effects even in patients who do not have an occlusal splint when experiencing periodic symptomatology.

Effectiveness

The feedback from TMD patients who used transdermal CBD for a 6 month period was overwhelmingly positive. Patients responded with comments such as; "my jaw feels lighter", "it was soothing and relaxing", "my jaw felt relaxed", "it took away the muscle tightness", and "my jaw feels more loose". Over 90% of my patients who used TRC Cream experienced its beneficial effects.

Conclusion

While current TMD therapies may prevent damage to the dentition, they will not typically stop a patient from clenching or bruxing. Therefore, it is a priority to offer options that may relieve patients of TMD related pain and discomfort.

I strongly recommend adding transdermal CBD cream to the treatment regime for patients suffering from TMD symptomatology as an additional source of non-invasive pain relief.