

Top 6 benefits of cannabis for Tourette's Syndrome

By: Seshata

Tourette's syndrome is a hereditary neuropsychiatric disorder that manifests in childhood and is typified by physical and vocal tics, such as repetitive jerking movements or (often socially-unacceptable) speech. Cannabis may help with various symptoms of Tourette's, including reducing anxiety and frequency of tics.

Tourette's syndrome is a hereditary neuropsychiatric disorder that manifests in childhood and is typified by physical and vocal tics, such as repetitive jerking movements or (often socially-unacceptable) speech. Cannabis may help with various symptoms of Tourette's, including reducing anxiety and frequency of tics.

Decreases frequency of tics

There has been considerable interest in the potential for cannabis to reduce the frequency of tics in Tourette's syndrome (TS) sufferers, and several papers have been published on the subject. A study by researchers in Hanover, Germany ([Müller-Vahl et al. 1998](#)) observed that 17 of 64 TS patients reported use of cannabis, and that 14 of those experienced partial or total relief of tics following its use.

Haddock aux mille visages

Haddock met de duizend gezichten

Alors que Tintin et Capo ne sont pas à l'aise, le capitaine Haddock est, lui, un bouillonnement constant d'émotions. Du corps et de la tête, il est un rocher érouillé en pierre-volcan, et, par là, le complètement relié à l'eau.

Tintin et Capo n'ont pas toujours envie de voir l'aspirine Haddock sans cesse éclabousser sur eux émotions. Mais parfois on finit par se faire plaisir avec tout ce qu'il y a de délicieusement dérangeant sur Haddock.

Malgré l'aspirine Haddock, les personnes, y compris Haddock lui-même, ont des émotions. Malgré tout, il faut faire face à ces émotions, mais ce n'est pas une chose facile pour lui. C'est une situation difficile à gérer.



Tourette's is typified by repetitive motor and vocal tics (© fmpgoh).

The German researchers went on to conduct several further studies into cannabis and the reduction of tics, all of which found that the majority of patients experienced significant relief after using cannabis, and that very few patients experienced side-effects. It is thought that cannabis reduces TS tics in a similar manner to other dystonia-inducing conditions such as Parkinson's.

It is not clear precisely what this mechanism is,

but it is thought that it may lie in the densely-clustered cannabinoid receptors in the basal ganglia and hippocampus, areas of the brain that are fundamentally involved in the control of behaviour and movement, and that are known to be abnormal in affected individuals.

Reduces obsessive-compulsive symptoms

Obsessive-compulsive disorder is the most common comorbid condition present in TS patients. TS patients who also have OCD exhibit repetitive counting, touching, and “ordering” behaviours, and may also exhibit increased aggression compared to sufferers of OCD alone.

Most of the studies conducted by the researchers in Hanover, Germany found that patients experienced a decline in obsessive-compulsive symptoms along with a reduction in tics. However, their 2001 study (the full text of which can be found [here](#)) investigating neuropsychological performance of TS patients treated with ??-THC found that obsessive-compulsive behaviours and phobic anxiety “demonstrated a significant deterioration” (i.e. symptoms became worse) following use of THC.

Increases effectiveness of conventional TS drugs

As well as investigation into cannabis as a treatment for TS in its own right, there has been significant interest in its use as an adjunctive (add-on) therapy alongside certain conventional TS medications. Müller-Vahl *et al* observed in a [2002 case study](#) of a 24-year-old woman that “??-THC may be useful in augmenting the pharmacological response to atypical NL such as amisulpride and risperidone in TS patients”, and that



“no serious adverse reactions occurred”.

Tourette’s causes sleep disturbances in many sufferers (© Rigmarole).

As well as this, a much earlier study published in the journal *Life*

Sciences in 1989 suggested that both cannabinoids and nicotine could “significantly enhance” the effectiveness of “neuroleptics” (antipsychotics) in motor diseases including TS. Furthermore, the only two randomized controlled trials that have been conducted on cannabis and TS compare use of a cannabinoid as sole therapy and as adjunctive therapy against placebo; both found that use alongside other medications yielded the most positive results. However, sample sizes were small for both these studies, and further investigation is required to confirm the results.

Interestingly, cannabis has also been noted since as early as 1988 to be effective in individuals who did not respond to conventional TS treatments at all.

Anti-insomnia

Many patients who suffer from Tourette’s also experience sleep disorders. While there has been no research specifically into the effect of cannabinoids on sleep disturbances in TS patients, there is plenty of anecdotal evidence suggesting that cannabis can have a positive effect on this aspect of TS too. For example, TS is known to cause increased sleep latency (delayed onset of sleep), while cannabis has been widely demonstrated to reduce sleep latency and lessen the difficulty of falling asleep in many individuals.

TS sufferers are also shown to have increased tic frequency during REM sleep, while cannabis use has been shown to reduce the duration of REM sleep altogether, which may cause TS sufferers to experience more restful sleep. TS sufferers are also less able to remain asleep through the night, another feature of insomnia that cannabis can help to treat.

Anxiolytic

Anxiety is a common feature of TS for many sufferers. Although the valuable research conducted by Müller-Vahl *et al* (and the various other research teams that have



investigated the potential for cannabis to treat TS) generally found that use of cannabis did not positively affect anxiety levels, and in one study even increased the incidence of phobic anxiety, there have been abundant anecdotal reports of TS sufferers experiencing subjective improvement of anxiety.

Aggression is a common feature of individuals with Tourette's (© Isengardt).

There is even a trademarked "cannabis pill" named Idrasil™ that is marketed at TS sufferers in the U.S. medical states; on their [website](#), they state that their patients experience reduced tics and anxiety when taking Idrasil regularly.

Reduces aggression

Another common feature of TS is aggression and rage outbursts; this is particularly common in children (affecting up to 25% of children with TS) but is also present in a significant minority of adults. These outbursts typically manifest as unpredictable displays of aggression that are greatly disproportionate to the perceived provocation, and may often present the risk of serious self-harm or injury to others.

Again, the potential for cannabis to treat symptoms of aggression in TS sufferers has not been formally investigated, but there is substantial anecdotal evidence from TS sufferers that cannabis use has a positive effect on aggression. As well as this, many individuals suffering from ADHD (a closely-related disorder that is often comorbid with TS) report a subjectively positive effect on aggression.