



TICS & TOURETTES PROCEDURE:

Tics are small repetitive involuntary movements which can be tiring and embarrassing for a child.

Essentially it is a hyperactivity of the neurons in the cerebral cortex.

Most people think first of the vocal kind (words or even sentences) - though it's more uncommon!

The most common I see are:

- * Blinking
- * Mouth opening or grimacing
- * Head twitching
- * Grunting
- * Sniffing

Built up tension and anxiety are the most common causes. I will often find there is a fear of conflict based upon regular experiences with family and/or friends.

These children tend to be quite sensitive in nature but put forth a tough or nonchalant exterior. In other words, they internalise all of their sensitivity. They also tend to be quite intelligent/tuned in so can be confused by the hurtful and childish responses of the people around them.

This combination leaves them feeling out of control of their environment which therefore creates extreme inner tension!

The tics can come at stressful times and go just as quickly. I find school terms a good example (coming at school times and leaving at holidays!)

What else to look at:

- * Liver Wind
- * GABA Abnormalities
- * PPMP - Potassium Phosphate Magnesium Phosphate
- * Strep Bacteria

GABA Abnormalities:

MRI studies have consistently shown a reduced level of GABA in the brains of those with tourettes syndrome.

GABA is responsible for sending signals to the cerebral cortex and other areas of the brain to initiate and suppress movements of the muscle groups of our bodies. When there are appropriate levels of GABA, there is a muscle relaxant effect, and not only do we feel less tense, but we can move more smoothly and have more control over the way we move.

GABA production:

B6 + co factors = GAD (an enzyme) = breaks down glutamate = GABA

Often it is a lack of B6 that causes GABA deficiency.

* see notes for article on GABA.

PPMP:

I have found this supplement to be incredible for tics. You may need a naturopath to sign off on it for you - it's a Blackmores Professional.

** You can also do in a high dose magnesium bath instead!

From the product description:

"Potassium phosphate and magnesium phosphate are involved in energy production and the functioning of the muscles, nervous system and cardiovascular system.

- Potassium, magnesium and phosphate work together to support energy production and neuromuscular function.

- **Energy production:** The production and storage of energy in the body depends on the availability of both magnesium and phosphate. Phosphate is incorporated into compounds such as ATP and cyclic AMP. Magnesium combines with and stabilises the ATP molecule, and the resultant Mg-ATP complex (rather than ATP alone), is the substrate for most ATP-requiring enzymes.

- **Neuromuscular function:** Magnesium has inhibitory and stabilising effects on neurons at the neuromuscular junction, and plays an influencing role in the release of neurotransmitters.

- Potassium is an integral component of the sodium-potassium pump, which maintains the potential difference across cell membranes, so is required for the regulation of neuromuscular excitability and stimulation, transmission of electrochemical impulses and contraction of muscle fibres.

- **Cardiovascular function:** Magnesium is involved in the regulation of peripheral and cerebral vascular tone.

- The heart requires the correct balance of potassium and calcium for rhythmicity of contractions."

Liver Wind

PROCEDURE:

1. Settle the cerebral cortex - st 8s, Gv 20/24, ESRs.
2. Treat Liver Wind: Liver 3s
3. Deep channel clear on liver & kidney
4. Get to the source of the anxieties and talk through them!
5. Rhythmic movements to release tension

HOME SUGGESTIONS:

- Practice with the child a response when other children point out the tic. I've found a simple "It's called a tic and I can't control it" to be useful. Children will poke fun usually only if they don't understand!
- Keep the child talking about their feelings at home.
- As often as can, when the tic occurs, do the tic purposefully, extremely slowly & exaggerated 10x. This will help gain control over the muscles and release tension.
- We often find that screen time makes them worse. I have found using a trampoline regularly after or at intervals during screen time incredibly helpful for teenagers who suffer tics.