

MAIN PAPER

DYSTONIA AND HYPNOSIS

David Y. Medd

North Riding Infirmary, Middlesbrough

Dystonia is a neurological disorder of the basal ganglia manifesting as muscle spasms, usually repetitive, and usually made worse by voluntary movement (Marsden & Quinn, 1990). The spasms can occur anywhere in the body, and the condition may be labelled focal, segmental, hemi-dystonia or generalised according to location. The commonest form is spasmodic torticollis, affecting muscles in the neck (Marsden & Quinn, 1990). The four cases presented later are all of torticollis.

Dystonia is fairly evenly distributed geographically and by social class, although women are more likely than men to report focal dystonias by a ratio of about 2:1. This year, 1996, the prevalence of primary and secondary dystonia is being epidemiologically revised upwards to a figure of over 40 per 100,000, similar to that for multiple sclerosis (Butler & Duffey, 1996). This figure excludes cases of Parkinsonism and drug-induced dystonia.

The first class of causes is large and includes strokes and head injuries, many metabolic disorders, and brain chemistry dysfunctions. These are called symptomatic or secondary dystonias. Primary or idiopathic dystonia, the other class, is often inherited, especially in dystonia of childhood onset which is often progressive.

Over 80% of dystonia patients report moderate or severe pain (Gudex, Hawthorne, Butler, & Duffey, 1996). Brain scans may reveal lesions in the basal ganglia, but no structural cause or consistent biochemical disturbance has been found. Electrophysiological studies of the different kinds of dystonia indicate over- or underactive neural states and also failures to inhibit unwanted motor activity (Marsden & Quinn, 1990).

It is perhaps at this point of irregular stimulation or failed inhibition that some rationale may be found for the effects of hypnosis, possibly related to those reported with Parkinson's disease patients (Kroger, 1977).

THERAPY

Most psychometric studies suggest there is no specific personality profile for torticollis, but all psychosocial investigations report a high incidence of depression (Jahanshahi & Marsden, 1988a,b). Some success in therapy has been achieved using EMG biofeedback training (Jahanshahi, Sartory & Marsden, 1991), behavioural (Spencer, Goetsch, Brugnoli & Herman, 1991) and paradoxical methods. Successful use of hypnosis for torticollis is recorded in a small number of single- case studies, mostly in the USA (e.g., Friedman, 1965; Gibson & Heap, 1991; Scheiderman, Leu, *et al.*, 1987).

Medical treatment is either with drugs, mostly anti-cholinergics, or by injections in the offending muscles with botulinum toxin which temporarily destroys some millimetres of the motor nerve ends. Benefit is calculated by medical audit to be about 85% across patients and types of dystonia (Barnes, 1996).

There is work on spontaneous remission in spasmodic torticollis (Jayne, Lees & Stern, 1984). Follow-up of 26 patients after 20 years showed a 16% rate of remission, but Marsden gives only 5% for idiopathic cases (Marsden & Quinn, 1990). These figures should affect any conclusions drawn from long-term therapy.

Finally, I am employed by the Dystonia Society (North East) in Middlesbrough's North Riding Infirmary as a counsellor, under the direction of the Consultant ENT Surgeon, whose team carries out botulinum toxin injections on patients with dystonia. I do counselling work, often of a cognitive nature, with patients with dystonia, and with their partners or dependents. If patients make a request, I use hypnosis as an adjunct to counselling, either to help to relieve pain, relax muscles or to improve sleep.

FOUR CASE HISTORIES OF PRIMARY SPASMODIC TORTICOLLIS

Colin

Colin is retired, single, and lives alone. He has had spasmodic torticollis for four years. He takes Diazepam and Artane and receives injections of botulinum toxin in the back and side of the neck. The ENT surgeon is puzzled that his head should pull forward so strongly after the injections. His neck aches. His head is bent forward and to the left, and there is some tremor.

He rarely goes out. For some time he has experienced a lump in his throat on swallowing, which puts him off eating. He is fairly short, and weighs only 79 lbs, or 36 kg. On the Beck Depression Inventory, he is moderately to severely depressed, feels bad about the future, and thinks of himself as 'ugly'.

He raised the subject of hypnotherapy at our third session. His complaints were pain, tension and embarrassment. Because I judged him to be fearful of authority, and because he wanted to know what people were doing to him, I said before induction that he would remain alert and aware of all my procedures, and be able to walk away at any time. I used alert hypnosis on four occasions.

On the first, I suggested comfort to the back of the neck, relaxation at the front, and confidence in the throat for swallowing. I had inferred that anxiety was aggravating dystonic effects in the throat.

Under hypnosis, his head became centrally aligned, and the chin was lifted to the normal position, or even higher. He stayed in this posture for several minutes. After hypnosis, he could turn his head more easily to the right and the neck was possibly more comfortable. He felt it would stay like that, however, only until he got outside! The ENT surgeon suggested it would have been useful to videorecord it.

In the second session, he kept his eyes open a long time during induction, and then suddenly relaxed, but still with his arms folded. All tremor vanished and he achieved the same degree of muscle relaxation and normal head posture as in the previous session. A post-hypnotic suggestion (PHS) for relaxation was added, involving sitting quietly, saying his name to himself, counting 1, 2, 3, slowly, and adding the suggestion 'Relax'. This was practised during and after hypnosis in the session.

On the next two sessions with hypnosis, no reduction in discomfort or maintenance of the improved posture was achieved beyond the session itself.

For the next four sessions, he kept up conversation until it was too late to use hypnosis, and then expressed surprise that the time had flown. Contact was broken early in 1996. However, in mid May, he died by a cause that was unrelated to dystonia.

Barbara

Barbara has painful dystonia in both trapezius muscles, making it difficult to turn or incline her head. She is in her 50s, otherwise physically well, and moderately or severely depressed. She has always been a sportswoman. She receives injections for the dystonia, Dothiepin for depression, Haloperidol for relaxing at night, and *had* been on tetrabenazine for the dystonia, but had weaned herself off because of the side-effects. Her head had first begun to pull to the left when she was 28. For the last 15 years, she has suffered from fatigue.

At our sixth session, I suggested hypnosis might help to relax her neck. She chose the left trapezius to work on, and in the first use of hypnosis, I suggested that relaxation would gather from the calmest places in her life, and flow into that particular muscle. Knowing there was a religious aspect to her life, I also suggested that a soft light would gather around her and relax the muscle. Later, after hypnosis, she said she preferred the image of help from outside.

Difficulties, followed by a holiday, have prevented her attending for some weeks, but she recently phoned to say her neck has remained more flexible and comfortable since the hypnosis. Her reaction to this one session seems very promising.

Angus

Angus is in his 40s, married with one son, and has spasmodic torticollis on the right. He gets the botulinum toxin injections, and takes Diazepam. The torticollis began when he was 30, and diagnosis took six years to complete.

At the age of 25, he had been informed he was suffering from agoraphobia and panic disorder, for which, last year, 15 years later, he still satisfied DSM IV criteria. He had then inferred that all his untreatable problems were the result of a brain disorder. He still spent most of his time at home and his wife came into all the sessions as necessary support.

He enquired about hypnosis at our fifth session. At the seventh, I agreed to attempt a relaxation of the neck. At the next session, specific attention was paid to relaxing the right trapezius muscle which often twitched, and it was suggested that different messages could be sent from the brain to help it. This was repeated at the following session.

By the eleventh, 'flu had delayed his receiving the new injections and the effect of the old had certainly worn off.

Hypnosis had now been used for four sessions. He reported that the twitch appeared only rarely, the pain had been much less during the last week, and the headaches had stayed away. We used hypnosis once more, but then his turn for the injections had come up, and our work reverted to counselling.

Doris

Doris is a vigorous octogenarian, and has had spasmodic torticollis for over 40 years for which she is prescribed Artane and Diazepam. She also receives Prothiaden for depression. The Artane has unpleasant side effects. The trapezius and sterno-mastoid muscles on both sides are in repeated spasm, causing pain and a clearly visible shaking of the head. The chin is pulled down to a varying extent. Swallowing is affected

and her voice is frequently husky. When the dystonia began she became very sensitive to noise.

I have seen her four times in three months. Travelling to the hospital by public transport is a problem, and her appearance in any case makes her withdraw socially.

On our second session, a fortnight after injections to the neck and throat, she was still dystonically affected in voice, swallowing and head tremor. She requested hypnosis, which was given. I suggested she return to a time before she had any dystonia symptoms, and physically re-experience how she then felt. These feelings were linked to post-hypnotic suggestions of relaxation in the present. Reduced sensitivity to noises at night was also suggested.

After hypnosis, she felt more relaxed and was very pleased. She said she was talking better, and within another half hour her voice sounded normal. A fortnight later, her voice was intermittently croaky. Swallowing was limited to small spoonfuls of liquid. She had combined the PHS for returning to a symptom-free state in the past with deep breathing to get more sleep. Noises were now bothering her less.

In hypnosis, I suggested relaxation to the tense neck muscles and a return to the normal swallowing of the old days. Head tremor now reduced to about 1 cm of travel for the chin, she was indeed relaxed and the voice was clearer. She yawned pleasantly several times and could not remember when she had last done so. On leaving me, she went into the waiting room and announced to other patients that her head-shaking, although just visible, had completely gone.

A month later, her voice was still good. In hypnosis, we worked on relaxing the spasms across the shoulders, and used the 'safe place' experience to help her with strange people and places. After this session, the tremor reduced to about a quarter, and she felt much more confident. Counselling contact was then broken, but she told me recently that she had subsequently had two foreign holidays.

DISCUSSION

These four cases of torticollis show that hypnosis may reduce the symptoms. In some cases pain or discomfort may be permanently reduced. In others, spasms on one side of the neck causing torsion, or on both and causing tremor, may be stopped completely during hypnosis or lessened temporarily afterwards.

Until a wider variety of types of dystonia have been studied for the effects of hypnosis, and until follow-up studies of at least two years are available, it would be premature to make any generalizations regarding treatment by hypnotherapy.

The debate over the aetiology of the dystonias has been settled in favour of a neurological origin. The sensitivity of the disease to stress allows us easily to study psychophysiological factors in its presentation.

In cases of spasmodic torticollis, it is conceivable that hypnosis may not achieve its effects simply by alleviating anxiety or depression, but may have influence also by acting upon the neurological substratum of the condition by allowing the natural inhibition of unwanted efferent impulses to take place (Marsden & Quinn, 1990).

The relation of hypnosis to dystonia and a rationale for its effects may best be sketched out by medical theorists. Meanwhile, certain variables in dystonia and hypnosis practice will continue to be examined in future work.

REFERENCES

- Barnes, M.P. (1996). Hunter's Moor Neurological Rehabilitation Unit, Hunter's Moor Hospital, Newcastle upon Tyne, England. (Personal communication).

- Butler, A.G. & Duffey, P.O.F. (1996). The epidemiological survey of dystonia in the North East of England. *European Journal of Neurology* **3** (Suppl 2), 78.
- Friedman, H (1965). Hypnosis in the treatment of a case of torticollis. *American Journal of Clinical Hypnosis* **8**, 403–408.
- Gibson, H. B. & Heap, M. (1991). *Hypnosis in Therapy*. London: Lawrence Erlbaum Associates.
- Gudex, C.M., Hawthorne, M.R., Butler, A.G. & Duffey, P.O.F. (1996). *Measuring Patient Benefit from Botulinum Toxin in the Treatment of Dystonia*. Auckland: Pharmacoeconomics. Adis International.
- Jahanshahi, M. (1991). Psychosocial factors and depression in torticollis. *Journal of Psychosomatic Research* **35**, 493–507.
- Jahanshahi, M. & Marsden, C.D. (1988a). Depression in torticollis: a controlled study. *Psychological Medicine* **18**, 925–933.
- Jahanshahi, M. & Marsden, C.D. (1988b). Personality in torticollis: a controlled study. *Psychological Medicine* **18**, 375–387.
- Jahanshahi, M., Sartory, G. & Marsden, C.D. (1991). EMG biofeedback treatment of torticollis: a controlled outcome study. *Biofeedback and Self-Regulation* **16**(4), 414–448.
- Jayne, D., Lees, A.J. & Stern, G.M. (1984). Remission in spasmodic torticollis. *Journal of Neurology, Neurosurgery, and Psychiatry* **47**, 1236–1237.
- Kroger, W.S. (1977). *Clinical and Experimental Hypnosis in Medicine, Dentistry and Psychology*. Philadelphia: J.B. Lippincott.
- Marsden, C.D. & Quinn, N.P. (1990). The dystonias. *British Medical Journal* **300**, 139–144.
- Scheiderman, M.J., Leu, R.H. & Glazeski, R.C. (1987). Successful hypnosis for spasmodic torticollis. *American Journal of Clinical Hypnosis* **29**(4), 260–263.
- Spencer, J., Goetsch, V.L., Brugnoli, R.J. & Herman, S. (1991). Behavior therapy for spasmodic torticollis: a case study suggesting a causal role for anxiety. *Journal of Behavior Therapy and Experimental Psychiatry* **22**(4) 305–311.

Address for correspondence:

David Y. Medd,
67 Redcar Road,
Marske by the Sea,
Redcar TS11 6AG
UK