

# MIGRAINE AND OTHER CHRONIC HEADACHES

## Preliminary Report on Experimental Physical Treatment

JOY EDELING, B.Sc. (Phys.) Rand,  
Principal Physiotherapist, Kimberley Hospital.

In applying Maitland manipulative treatment to headaches of suspected cervical origin, I experimentally applied these methods to headaches of other diagnoses. The results were so encouraging that I began to ignore accepted classifications of headaches and found that I was treating, with success, bad "migraines".

Astonished at the response that repeatedly came from all kinds of headaches, I was led to a complete rethink about the possible underlying pathology of chronic headache. Seeing that I had applied the same treatment, and only that, to this great variety of chronic headaches which had been resistant to as great a variety of treatment and that they all had responded to this one treatment, I was obliged to accept the apparent fact that the pain in all these cases must arise from the same source.

As the treatment used was mobilisation of the atlanto-occipital and atlanto-axial joints, and in all the cases these joints were remarkably irritable and often responded with exacerbation of symptoms before relief, (just as any other irritable joint responds to mobilisation), I see no alternative but to think that the symptoms arise from a derangement of these joints and that the pain in the head is referred — just as pain in the leg is referred from a lumbar-joint lesion.

Fortunately, Maitland mobilising treatment requires recorded detailed examination and assessment at each treatment session so that I have, in my headache series to date, such records of each case that indicate precise reaction of symptoms to specific techniques. I am completing these records with follow-up and aim to base my theory on 500 such cases. I shall then report on these in this Journal.

Although the dramatic relief of pain in response to this treatment was gratifying, it was not surprising as this is the response we have come to expect in mobilising vertebral joint lesions at other levels. But what has taken me completely by surprise, has been the comparable response of symptoms other than pain. We are all aware of the bewildering array of "other" symptoms associated with headache viz. visual disturbances, dizziness, blocked ears, nausea, feelings of local pressure, blocked nasal passages, ataxia

to name some of the more common ones. I have recorded testimony of immediate relief of such symptoms directly after mobilisation. The patient would sit up for reassessment and say "that bursting feeling is gone" or "I don't feel nauseous anymore" with an expression of incredulity that only, in the beginning, equalled my own. She had not been asked whether she was still nauseous, neither had there been any suggestion that the treatment might affect it. In fact, the treatment is so minimal that in the beginning they don't even know that that was supposed to be "treatment" and think that we are just "poking around".

This is not an isolated example. My records abound with responses where that remark may be — "My ear has opened up — I can hear you better" "that thick feeling in my throat has gone", "I can focus properly now", "the whirring in my ears is gone", "the throbbing has stopped". Even before they report that the pain has either lessened or shifted or gone — and occasionally, that it is worse. The only disappointing response is when they sit up and nothing has changed — and as my experience increases I find that usually means that

I have failed to localise the source of symptoms and then by trial and error I find the specific joint and the direction and grade of mobilisation to which it responds — again as in the treatment of any other painfully restricted joint which is throwing out symptoms.

I do not presume to understand the mechanisms involved in such reactions, but in all honesty, I also do not understand the mechanism by which "migraine" or other vascular headaches produce pain. Is vasoconstriction or dilatation a painful process?

On the other hand we do understand the pain mechanism of distal referred pain in other parts of the body. Where painful irritation of a pain-sensitive structure, felt, by mistaken cortical reference, at a point distant to the source but within the same developmental segment. And we do accept that where this source of pain is a mechanical derangement, pharmacological treatment is not effective and that the only treatment is to physically restore the dysfunction.

As for the other symptoms — do they really provide evidence that the problem is a vascular one? Mobilisation of a joint can have no vasomotor effect. The fact that these symptoms subsided after mobilising the appropriate joint means to me that they were in fact symptoms which arose as a result of an autonomic reaction to a painful joint. On improving the condition of the joint, the autonomic reaction, as well as the pain, subsides.

Perhaps the prevalence of headaches has, as the prevalence of backache certainly has, its roots in the evolutionary development of the upright posture. Most people are tender at the facet joints between the occiput and the atlas. But then most people have an occasional headache in the presence of any one of the many well-known precipitating factors of headache e.g. febrile conditions, fatigue, emotion, lumbar puncture, dialysis, menses, sinusitis and many more. It is only when something happens to aggravate this joint — it may be an injury or local pathology — that it becomes more irritable and throws out symptoms at increasingly less provocation. This explains the "worsening" pattern in cases of longstanding resistant chronic headache — it reflects a deterioration of the condition of the joint. Mobilisation improves to sub-symptomatic level, the condition of the joint.

Thinking along these lines, I arrived at the following possible explanation:

### HYPOTHESIS

That the underlying cause of chronic headaches is a mechanical derangement of the atlanto-occipital and/or the atlanto-axial joint which gives rise to a true referred pain within this developmental segment (cf. projected pain). Further that there is local irritation of the branches of the external and internal carotid arteries which lie in close anatomical relationship with these joints. This results in vaso-constriction followed by reflex vasodilatation of the cranial blood vessels. In addition that the autonomic network in this region becomes involved giving rise to a miscellany of symptoms other than pain.

On this basis I question the accepted classification of headaches which are symptomatically classified. I think that each "group" is simply another aggravating or precipitating condition which flares up the phenomenon I

describe above. Any one of these conditions do *not* give rise to headaches in subjects who have no primary cervical lesion, or whose lesion is sub-symptomatic.

I think that the vaso-constriction and vasodilatation of cranial blood vessels demonstrated during attacks of "true migraine" are not chemically induced, but result from mechanical irritation, alternatively are autonomic responses to a lesion.

I question the existence of a "psychogenic" headache until I am satisfied that it is not of cervical origin.

**TREATMENT.** I think that successful treatment of chronic headaches is physical and not pharmacological. I am currently treating any headache that presents, and at the same time analysing those treated and following them up. I would be grateful to anyone concurrently working on headaches for comparative results.

1. By medical treatment.
2. By physical treatment other than mobilising e.g. manipulation or treatment of muscle spasm.
3. By any physiotherapist who would like to try a group under my direction.  
Especially by anyone who may be working along the same lines and is forming similar or divergent opinions.

#### *Breakdown of Results to date*

Of 105 recorded cases treated by our staff of the past two years:

- 95 responded promptly with relief of pain and other symptoms;
  - 10 did not respond favourably or at all.
- Some of these were very irritable joints and responded with increased pain which settled to its previous level.

#### *On Follow-up of 6-12 months later*

37 have replied to date. Of these:—

- 8 Report no improvement;
- 17 report improvement of more than 60%;
- 12 no recurrence at all.

My results are open to inspection and discussion. No doubt there is fault to be found with my assessment and evaluation of results — I am a novice at compiling statistics and would greatly value advice and/or correction — and help. Above reflects my best effort at presenting my experience in figures.

#### *ADVANTAGES OF PHYSICAL TREATMENT*

1. More effective than medical treatment.
2. It is a gentle treatment with no contra-indications yet come across.
3. Requires no hospitalisation.
4. No drugs employed.
5. Results in tremendous reduction in drug-taking—to my mind, the most significant aspect—in spite of the fact that I *never* suggest to the patient that they reduce their self-medication.
6. No brainwashing of patient.
7. No "environmental manipulation".
8. No co-operation necessary.
9. Easily taught technique.
10. Cost — insignificant compared to that of complicated drug regimes.
11. The patients' inevitable anxieties about more sinister cause for unsuccessfully treated headaches allayed.
12. Neuroses, which result from prolonged unalleviated pain, resolve and patient gratefully resumes normal work or domestic duties and personal relationships.

*Acknowledgement.* The author would like to thank the Medical Superintendent, Kimberley Hospital for his help and encouragement in the investigations and preparation of this article.