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PENINSULA
MEDICAL SCHOOL
UNIVERSITIES OF EXETER & PLYMOUTH

Proposal for Further Investigation of Marma Therapy, as a supplementary technique to aid Recovery from Stroke

Overview: This document provides a broad outline for a programme of research aimed at providing definitive evidence about the efficacy of Marma Therapy as a possible supplementary therapy in assisting recovery from stroke. The proposed research would consist of two distinct phases, with progression to Phase 2 dependent on positive results being attained at Phase 1. In the first phase, we will design and implement a study to identify and demonstrate a biological mechanism in action (i.e. to demonstrate neurological and biological changes in response to therapy sessions, which are commensurate with stroke recovery). In phase 2, we will design and implement a pragmatic randomised controlled trial to measure the effectiveness and cost-effectiveness of using the therapy in clinical settings.

Background:

Prior pilot work by researchers at the Peninsula Medical School (article to be published in 206 in the Journal of Rehabilitation Medicine) has established that delivering Marma therapy for stroke patients acceptable to patients, and that conducting a larger trial would be feasible. The results from the small sample used indicate that there may be some benefits in terms of limb functioning, and possibly in terms if quicker recovery of trunk muscle control (i.e. ability to balance the torso). However, as the study involved low numbers of patients, clear conclusions could not be drawn, and this level of evidence is at best only weakly suggestive of any benefits. There is therefore a need for further research to establish what effects Marma therapy has on neurological function in post-stroke patients, and to definitively establish whether it could be an effective addition to existing stroke rehabilitation treatments.

Study Development Plan:

Phase 1: Biological /Neurological Mechanisms

The aim will be to identify and demonstrate the impact of Marma therapy in terms of biological and neurological changes which would be beneficial in stroke recovery. If such a mechanism can be shown to exist, then the cost of a larger trial would seem to be justified.

A panel of eminent scientists and clinicians with expertise in neurology, stroke rehabilitation and neurological imaging will be convened to review the existing evidence and to discuss possible mechanisms of action. This will include consideration of existing 're-connection theories' which propose that physical manipulation or stimulation activates neural pathways associated with the use of