Moxafrica's 100-Day Challenge Closes With Some Results

by Merlin Young, Jenny Craig and Yuki Itaya

At the September deadline date for this article the 100-Day Challenge for Long COVID had been running a full year. We decided to stop recruiting on this date in order to wind it down to its final conclusion over the next 100 days (which should happen sometime around Christmas). At that point we should have final data but in the meantime we can share what we already have.

Since we no longer need fresh referrals from colleagues (and more importantly because we have some preliminary results to report), we can share publicly the specific details of the four protocols we originally designed at the same time as disclosing some of the preliminary results. We can also provisionally discuss their clinical implications and, as importantly, their limitations.

It may be recalled that our original goal was to enrol 200 long-haulers, split them into four groups (each specific to one of the four protocols), and then see how they fared. Each protocol was carefully designed to have similar dosages in respect of number of cones prescribed, with each comprised of different treatment points (apart from bilateral ST-36 which was common to all protocols).

Breakdown of the Challenge

As we've previously reported, recruitment has unfortunately been quite a challenge. While we did manage to receive more than 200 applications, not all of them were eligible to enrol, fewer still actually ended up committing to starting the Challenge at the end of the initial enrolment process, and even fewer completed their Challenge as we'd hoped.

So let us first describe the general enrolment process. This consisted of discrete stages (each of which accounted for significant dropouts):

1. Initial active application by the potential Challenger
2. Invitation to submit a preliminary questionnaire (from which we could assess inclusion or exclusion)
3. Subject to (2), invitation to submit a 20-question baseline questionnaire (allowing us to develop a starting health score for each individual).
4. On receipt of each completed baseline questionnaire moxa was sent out along with detailed instructions also asking them to confirm to us the day they started their Challenge.
5. At the end of each challenger's 100 days, we invited each finisher to complete a 'final' questionnaire comprising the original questions (from which we could develop final comparative individual scores) along with a few others intended to give us a better picture of how they experienced the 100 days of moxa.

With these two key scores we have calculated individual improvement indices from which we can develop average improvement indices for each protocol. We also developed a 'control group' (comprised of those who told us that moxa 'wasn't for them' but who were nevertheless willing to answer the same final questionnaires around 100 days after we sent them their moxa). We thus ended up with five groups – four of which reflected the four protocols, and one of which could be defined as reflecting 'no moxa' at all.

The Protocols

Here are the details of each protocol. In all cases the moxa was intended to be done on a daily basis over a period of 100 days. It is worth adding that, apart from the theoretical reasons for selecting these points, we also found them to be commonly reactive in our preliminary palpatory assessments of our own long-hauler patients.

Protocol #1 (which we called the 'Sawada protocol' because we loosely based it on points which we know Sawada Ken Sensei used as part of his Taikokyu protocol):

Bilateral ST-36
Bilateral LI-11
Bilateral (Sawada) KI-6
Left TB-4
3 cones/point, 21 cones per day

Protocol #2 (which we called the Extra Vessel protocol):

Bilateral ST-36
Left LU-7
Right KI-6
Left SP-4
Right PC-6
18 cones per day

Protocol #3 (which we called the 'Detox protocol'):

Bilateral ST-36
Bilateral LI-4, 3. Bilateral KI-9
18 cones per day

Protocol #4 (which we called the 'vagus protocol'– the only one which required a helper, and therefore the most problematic in respect of completions):

Bitateral ST-36
Bilateral BL-20
Bilateral BL-23
GV-12
21 cones per day

Adherences to Study Design

We will report the current outcome data below, but we must stress that they are not final because we still have a number of ongoing uncompleted Challengers somewhere between start and finish. We must also stress that they should only be considered in the light of many limitations, some of which we identify below.

Firstly, though, here are some important enrolment anomalies reflecting adherences and completions (as of 10th September):

- 205 'preliminary' questionnaires were completed (this number now will not change).
- Of these, 136 'baseline' scoreable questionnaires were submitted (ie 70 fell at the first hurdle!)
- As a result, we sent out 136 sets of moxa.
- 47 of these 136 have now completed their Challenges (this number should increase because 18 are currently ongoing).
- Of these 47, only 37 have so far completed and returned their final questionnaires (along with an additional 5 'controls' who dropped out but agreed to complete the final questionnaire).
- Of those 136 to whom we sent moxa but who aren't part of the final data, 45 never confirmed that they started, 20 more of these subsequently confirmed they were dropping out, and a further number stopped replying to our emails in response to asking for updates.
- Of those who have so far finished and completed their questionnaires, the numbers using each protocol (P) were:

P 1: 9
P 2: 8
P 3: 9
P 4: 10

- In respect of those to whom we sent moxa kits but who never confirmed starting, 6 were on P1, 4 were on P2, 2 were on P3 and 2 were on P4. This does not give a comprehensive com-

parative picture of adherence rates, however. To offer a much better picture of how hard P4 turned out to be, almost half of those who were initially allocated to this protocol confirmed that they had started with a helper but subsequently asked to switch to another protocol because it was too tricky for their helper to perform.

The Results

(Calculated in average percentage improvements from the baseline of each group when individual final scores were compared to their originals.)

Table 1 shows that whilst the average scores for each protocol were not vastly different, the range of individual scores was very wide.

Protocol	% improvement	Range	Number of individuals
1	46	-11 – 81	9
2	44	13 – 81	8
3	49	4 – 74	9
4	53	19 – 80	10
Control	24	-30 – 86	6

Table 1

We found there to be a negative correlation between starting score (with higher scores amounting to a more severe initial condition) and percentage improvement. This was most clear with Protocol 1, but was not really seen with Protocol 4, suggesting that, if a helper is available, this may overall be the most generally appropriate protocol to use.

Discussions

Superficially, we can state that, on average, all the moxa protocols outperformed no moxa (ie that moxa generally may well be helpful in supporting recovery from Long COVID). Furthermore, we can add that the best performing protocol was P4, followed by P3. In other words, were we to home in on two protocols at this point of time (one of which would need a helper and the other not) these two could currently be the protocols we would choose (although it is actually difficult to differentiate between P1, P2, and P3).

However, we can equally caution that the numbers completing each of the protocols were far too small for us to be at all confident of this summary (completions currently totalling around a fifth of what we originally had planned to be the case). This significant limitation is compounded further by the fact that the ranges of improvements individually recorded within each group were enormous in their scope, meaning that some responses were inexplicably erratic.

We can also however state with some confidence that moxa very clearly is not for everyone. Of course, we anticipated this but (given the effort made to provide instructions and support) this conclusion nevertheless was a disappointment in respect of its scale. Given that a key symptom described by those responding to the first questionnaire was 'brain fog' perhaps it should have been better expected, however.

In respect of all the protocols, and also in respect the 'controls,' we furthermore cannot be confident of any the following, all of which may have been subject to high degrees of variability:

1. Whether challengers adhered to the requisite protocols as regularly as requested
2. Whether they located the points accurately
3. Whether they applied the moxa as technically consistently as instructed
4. Whether they were using other therapies at the same time (for ethical reasons we specifically never insisted on any such proscription, except that they should not have any other moxa therapy; in other words we can suggest that many may have had adjunctive acupuncture, homoeopathy, nutritional therapy etc, while many may not have had any other therapy at all). To illustrate this, one of the highest 'control' scores (that helped lift this group's average above what would otherwise have been below 20%) has attributed her significant recovery to personalised homoeopathy that started during her 100 days.

We also, of course, do not know whether our protocols were originally sub-optimally selected – there may well be better protocols out there that we failed to consider.

Summary

This project was designed primarily to reveal if one or more moxa protocols might be helpful in aiding and accelerating recoveries from Long COVID. Our current conclusion is that, while two protocols have currently emerged, they have not done so to a degree that we can be remotely confident in respect of their efficacies.

What Happens Next

Secondarily, we were attempting to establish whether it is either reasonable or safe to propose implementing a programme of remote moxibustion for long haulers anywhere, but most particularly in countries where health infrastructures mean that any sort of ongoing recovery support might be essentially absent.

Our answer to this second question is more nuanced than the first. Without question we have revealed that managing a remote moxa programme is very challenging. With regards to safety, however, we have had no serious adverse reactions reported to us (despite proactively inviting reports of any problems from the moment of sending out the moxa). We also know from the data that many Challengers found their daily moxa to be too much of a chore or something they basically got no enjoyment or meaningful results from. At the same time, however, we also had reports that others found it enjoyable, profoundly relaxing and also empowering in that it gave them much needed positive control over their condition.

What we have also come to recognise, however, is that Long COVID is not just very complex but also is often an extremely pernicious condition, far more so than 'classic' post-viral fatigue which

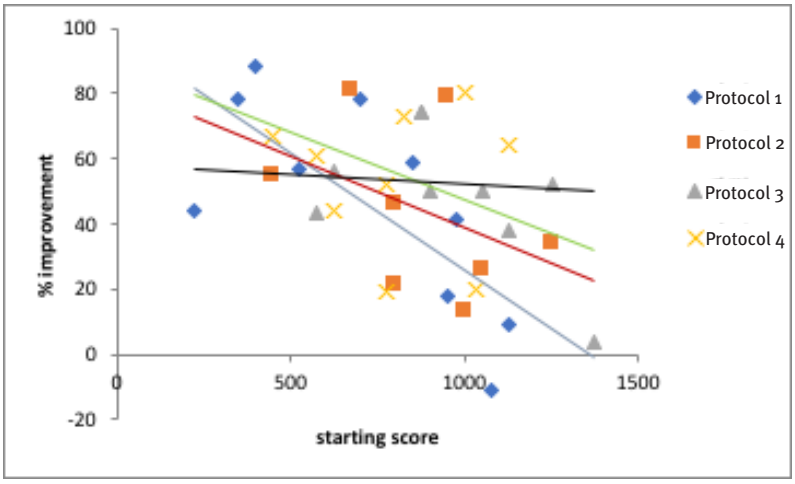

Figure 1 *Individual protocol correlations between improvement and original score*

(when we first conceived the Challenge) we believed it to be.

Does this rule out the idea of implementing a resultant 'remote' programme in which we could send out moxa and instructions anywhere in the world, but particularly to resource-poor countries? At this point of time we would answer that it doesn't rule this out,' and do so for two reasons. One of these arises from our experiences investigating moxa for TB during which we came face to face with just how poor medical support is for so many (and how much we take our own health resource for granted) while also realising that this deficiency is also chronically deteriorating. The second is because this post-COVID phenomenon is still so desperately insufficiently understood from a biomedical perspective, and that addressing this is still shamefully under-resourced and ill-addressed even in richer countries. In other words, there remains an immense gap between the need for a practical therapy for Long COVID and the provision of one.

To summarise the more global situation in a nutshell: even in high income countries, Long COVID is a significant health problem of unknown magnitude and unknown duration, and in light of this, the scale of the problem globally is a total unknown. A very recent survey by the UK government's Office of National Statistics, however, reports that 2 million Britons (or 3.1% of the total UK population) are currently self-reporting having Long COVID. What's more, a staggering 45% of these report their condition as being of at least one year's duration, and a profoundly concerning 22% (or nearly half a million) report their condition as being ongoing after 2 years (proportions, incidentally, which are not dissimilar from our own data gleaned from our questionnaires). How poorly these folk really are is unknown, but how long their suffering may continue is the really worrying unknown behind this survey. Is something similar occurring in lower-income countries? Who knows, because no-one is asking the question and the consequences could be awful.

In other words, we can reasonably assume that a global need is almost certainly immense. And we can further argue from the data above that even if moxa might only help a fifth of those long haulers to whom it might be introduced, it could still represent a valid and valiant gesture towards promoting healing and reducing human suffering.

Finally, the results reported here reflect the combined effects of moxa on a wide range of physical and mental symptoms covered by the questionnaires. We have yet to analyse any comparative effects of the protocols on specific groups of symptoms and other parameters for which we collected data. We will, however, provide more details, as well as more information on participants' demographics, in the next edition of NAJOM if this is acceptable to the editors.

Notes

1. Office For National Statistics (ONS). "Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK, 1 September 2022." September 1, 2022.

Merlin Young *graduated from the College of Traditional Acupuncture (UK) in 1999 and since then has been intensively studying Japanese acupuncture and moxibustion. Following his exposure to the work of Dr Paul Farmer in Haiti and Peru, he became particularly interested in the subject of drug resistance in tuberculosis and its connections to the politics of global medicine. In 2008, he co-founded the Moxafrica charity to systematically investigate whether Japanese-style direct moxa techniques might be able to combat TB, drug-resistant TB, and even TB in combination with HIV/AIDS in the developing world.*

Jenny Craig *has a background in biological research and a PhD in plant sciences. In 1997, she took a career change, training in acupuncture at the College of Traditional Acupuncture, UK. Later, she followed up by completing the basic and advanced Toyohari training with Stephen Birch in Amsterdam. She has taken part in vol- untary work with other acupuncturists in India and Sri Lanka and these experiences, together with a special interest in moxa arising from her Toyohari training, provided the background for her involvement in the Moxafrica charity, of which she is a co-founder.*

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