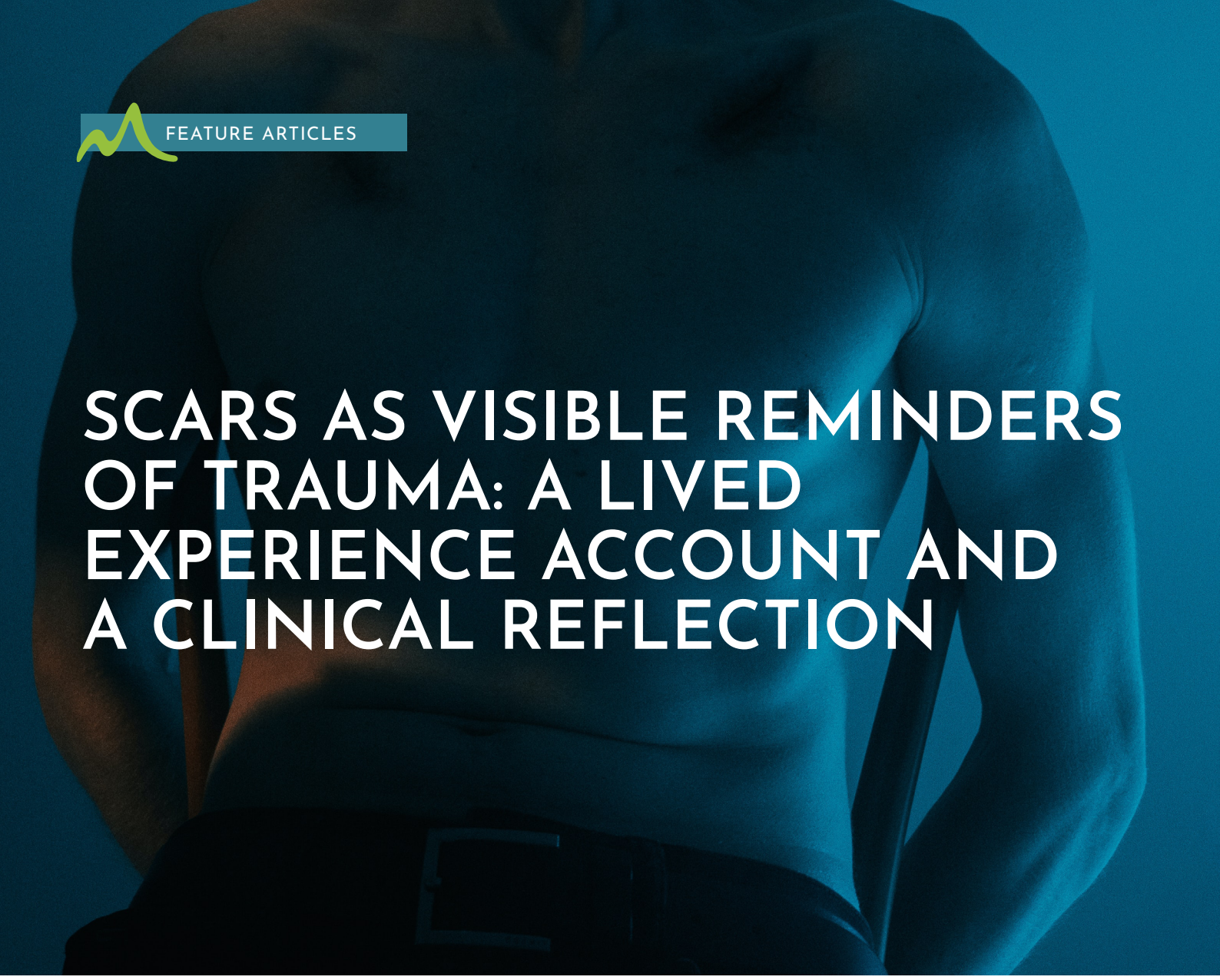

SCARS AS VISIBLE REMINDERS OF TRAUMA: A LIVED EXPERIENCE ACCOUNT AND A CLINICAL REFLECTION

Odette Wood interviews a client with past trauma related to major surgical interventions causing abdominal scarring and provides a clinical reflection of her work with her client. The client's name has been changed to protect his privacy.

CLIENT PERSPECTIVE

I was never seriously ill prior to November 2018, at 40 years old. Since then, I have been hospitalised a dozen times and had three surgeries, two of which were serious 6+ hours long. The senior surgeon on my first surgery said he had never seen such a mess in a person's abdomen. I was misdiagnosed countless times, had around 15 sets of imaging taken (CT scans, MRIs, MR Enterography, CT Colonography), had half a dozen colonoscopies in 2 years and a cystoscopy. None of these helped to definitively diagnose the problem. On one particular day when I was undergoing another colonoscopy, I was diagnosed with 4 different conditions in less than 24 hours, ranging from Crohn's to intussusception (a serious condition where one part of the intestine slides into an adjacent part). In my despair, I even resorted to alternative medicine techniques which were all unhelpful.

In November 2018, I was admitted to hospital for the first time for diverticulitis with perforation. After being treated with heavy antibiotics for 2 weeks, I was told that everything was fine and I was unlikely to have further episodes. Four months later, in March 2019, I was admitted again and needed emergency surgery which started at 6pm and finished at around 1am. My small bowel was resected due to a vulvus/twist, my appendix was removed because it adhered to the sigmoid, part of my omentum was removed and my sigmoid was unstuck from various other organs. The inflammation from the original diverticulitis attack caused serious scar tissue and adherence between organs and the main cause was an abscess that was the result of my diverticulitis (and perforation) which was not seen on discharge from hospital the first time. I was told that this was the end of the issue. Two months later I was hospitalised again and then again, every few months for the next 1.5 years until another surgery removed my sigmoid colon.

These years have been extremely traumatic and I'm sure to be suffering from PTSD. My quality of life has declined sharply. I can eat hardly anything as a result of the surgeries and things we used to enjoy doing in the past – like going to a restaurant – have been completely eliminated.

Everything is a struggle, including going on trips, being away from home, going to the office etc.

The most traumatic bit of the whole thing was the several misdiagnoses and the constant up and down of medical opinion. In the event, I had consultations with top doctors in four countries. I was told several times that my issue had been fixed, only to be hospitalised or face major surgery once again a few months down the line. It felt interminable and that it would in fact never end.

My scars are evidence of this trauma. They are there to remind me every day of the nightmare I went through. Before massage therapy treatment, I could not even look at them, let alone touch them. If I wanted to feel depressed, all I had to do was remove my t-shirt and look in the mirror.

Massage therapy has helped me enormously. After around 1.5 years of sessions (once every 2 weeks) I am still not best friends with my scars. But I am comfortable with their presence on me. I still don't like to look at them or touch them, but I do.

I get a burning sensation – literally as though on fire – when my scars are massaged and stretched. When my therapist gave me a spikey ball to squeeze in my hand at the same time, the pain and burning sensation reduced by more than half. My mind was occupied with another sensation in my hand and stopped focussing exclusively on the burning sensation on my scars.

To help myself, I swim 3 or 4 times a week because I feel that the swimming movement helps with the elasticity of the scars. When I am in the shower, I make it a point to touch my scars and soap over them to keep desensitising the area. I did not dream of doing this prior to treatment.

As a result of the massage therapy treatment I have been having I am less aware of my scars. I still feel them, and they do feel tight sometimes but before treatment I was constantly aware of them as though there was a direct connection between the scars and my brain. The benefit from the stretching of the scars during therapy lasts for a number of days afterwards, and during that time the scars feel less like an extraneous addition to my body.

The things in treatment I have found most beneficial are the scar stretching and the mental wellbeing aspects. Without the latter, the physical (manual) therapy will not work as effectively. You cannot have one without the other since brain and body are connected, especially when it comes to abdominal issues and the gut/brain axis. The ability to breathe and relax helps also with the massage itself – pain on the scars is lessened by proper breathing techniques.

One thing that helps me is the regular (fortnightly) sessions. I don't think it would be so effective if I had treatment once a month for example. There were many times when I'd have a bad episode and feel awful, but I'd know that in a few days I have a session coming up. Like a circuit breaker.

My wife started looking at massage therapy for me whilst researching deep tissue massage for abdominal issues to prevent/reduce scar tissue and therefore avoid small bowel obstructions and the like. My wife found my therapist online and after reading about the work she does with scar tissue and chronic pain as well as the holistic approach she adopts towards therapy, we booked our first appointment and have never looked back since. Surgical experiences, especially of the non-elective kind, are traumatic for many people. Whilst the memory slowly fades, the scars on your body are testament to remind us of what we have been through. In my opinion, a massage therapist that focuses exclusively on the physical aspects of the therapy is leaving 50% of the other stuff out. Without an appreciation for the part that mental wellbeing and mindfulness play on physical manifestations, massage therapy will only be partially beneficial. Massage therapy has helped me enormously and whilst I still struggle with my scars, with the trauma and the pain, I am in a far better place than when I started and I know that I am moving in the right direction and continuously improving, a small step at a time.

THERAPIST CLINICAL REFLECTION

Client intake

My client, John (name changed for privacy) is a 44 yo male professional. I began working with him in early October 2020 and continue to work with him fortnightly. He came seeking help for pain and tension he was experiencing related to two parallel Pfannenstiel incisions which were from abdominal surgeries he had between March 2019 and June 2020 for diverticulitis. In his own words he found his scars intolerable, expressed that they did not belong to his body and after the first major operation, the longest scar had really annoyed him and he was always aware of it. His surgeon advised that massage for this type of scarring would be ineffective and pointless, but John wanted to try it. His identified treatment goals were wellbeing improvement and rehabilitation. His expectations were to feel more at ease and connected to this part of his body.

In the client intake and history-taking he noted that he experienced anxiety pre- and post-surgery, and also depression and PTSD post-surgery, although he had not been diagnosed with PTSD or sought help for it. He was unable to look at or touch his scars, had aversive responses to them because they reminded him of the surgeries, and hated the way they looked and felt. He had feelings of disconnection from the area of his body which is a form of dissociation. John reported being triggered by talking about abdominal surgery (his or other peoples) or seeing abdominal surgery on TV, to the point that he would have flashbacks to his own surgery. This would cause him to relive the experience, become more aware of his scars and begin to feel pain there. He was unable to wear briefs or any clothing that rubbed against or pressed on the scars because they caused discomfort. Taking all these factors

into consideration it is likely John meets the criteria for PTSD (American Psychiatric Association, 2013), although he has not been formally diagnosed. The criteria and symptoms are shown in table 1.

Table 1

DSM-5 PTSD DIAGNOSTIC CRITERIA

Criteria	Symptom/description
Criterion A: Stressor	The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence via: direct exposure, witnessing the trauma, learning that a relative or close friend was exposed to a trauma, indirect exposure to aversive details of the trauma, usually in the course of professional duties
Criterion B: Intrusion symptoms	Intrusive re-experiencing of the event e.g. unwanted upsetting memories, flashbacks, nightmares, emotional distress and/or physical reactivity after exposure to reminders of the trauma
Criterion C: Avoidance	Avoidance of trauma-related stimuli after the trauma i.e. trauma-related thoughts or feelings, trauma-related external reminders
Criterion D: Negative alterations in cognitions and mood	Negative thoughts or feelings that began or worsened after the trauma e.g. inability to recall key features of the trauma, overly negative thoughts and assumptions about oneself or the world, exaggerated blame of self or others for causing the trauma negative affect, decreased interest in activities, feeling isolated, difficulty experiencing positive affect
Criterion E: Alterations in arousal and reactivity	Trauma-related arousal and reactivity that began or worsened after the trauma e.g. hypervigilance, exaggerated startle response, irritability or aggression, risky or destructive behaviour, difficulty concentrating, difficulty sleeping

Note. Adapted from: https://www.brainline.org/article/dsm-5-criteria-ptsd

Important clinical observations

During the initial assessment and first treatment session I noticed several behaviours consistent with PTSD which required a trauma-informed approach.

- Elevated anxiety/startle response to touch, especially around his abdomen and scars: need to support reduced physiological arousal before engaging in direct touch
- High level of avoidance: required graded exposure approach (Jensen, 2011) by progressively exposing him to experiencing his scars being touched in a safe and non-nocebic way
- Unaware of impact of physiological arousal/trauma on pain and avoidance: need to provide explanation of the relationship between these.

Conclusion from findings

My analysis was that John was experiencing pain and discomfort from scarring and a disconnect from that part of his body which was caused by his traumatic surgery experiences. While his scars were areas of pain, tension and pull, they were also constant reminders of the trauma he had experienced. Additionally, he experienced tension in his lower and upper back, shoulders and neck which may also be related to his past trauma through habitual muscle guarding and increased sympathetic arousal.

Case formulation

In my practice I used a case formulation approach as opposed to the standard SOAP notes I was originally taught. I have been using this since 2019 when I began my postgraduate studies in pain and pain management. I find it a more thorough method for carrying out a client intake as it is more comprehensive way of framing questions within the biopsychosocial model. It allows me to group what can be complex and detailed information from the client into categories about underlying, triggering, and maintaining factors that are influencing their presenting issue, as well as resources the client has that can help them (Eells et al., 1998; MacNeil et al., 2012). Case formulation helps me understand the client more deeply and provides me with a blueprint that guides my treatment that I can measure changes against.

I use the 5 Ps case formulation model (MacNeil et al., 2012) which has its roots in clinical psychology but is also used in other health disciplines now as well. It groups information under five headings: presenting problem (why the client is here), predisposing factors (underlying vulnerabilities), precipitating factors (recent influences that may have triggered or flared the presenting problem), perpetuating factors (which are maintaining the presenting problem), and protective factors (resources they have or can draw on to help them manage their presenting problem in a positive way). For John, my case formulation is described in table 2.

Table 2

5 P'S CASE FORMULATION INFORMATION

5 P's	Information from client
Presenting problem	Concern about abdominal scars and associated pain re surgeries
Predisposing factors	Dx diverticulitis. Anxiety
Precipitating factors	Multiple surgeries including most recent bowel re-section surgery caused increased scarring and adhesions
Perpetuating factors	Anxiety - gets anxious with any abdominal pain, afraid scar tissue inside would adhere, thinks it may be another obstruction. Loss of agency and bodily autonomy, PTSD re surgeries, reduced movement/ physical activity since having surgeries, job involves long periods at computer generally standing and often late at night. Stress also a factor
Protective factors	Walks (dog) 1 hr/day, having physio for pelvic floor dysfunction, will be starting Pilates movement classes soon

TRAUMA-INFORMED APPROACH

Understanding John's history and presentation meant that treatment had to meet him where he was at, so a slow approach was important. Not only within each session, but also from session to session. I realised that rushing to do too much too soon could be counterproductive. Building trust and creating an environment he felt safe in was vital in the early stages as I did not want to retraumatise him. It was important to explain what I was doing and why to allow his nervous system time to prepare. Also explaining what I was observing and how his nervous system might be reacting to help him make sense of his bodily responses, encouraging him to focus on his breath and guide him to practice belly breathing and allow his body to relax have all been important parts of treatment.

I wanted to understand John's perceptions of his scars to be able to work with him effectively so early in the treatment plan I had him complete the Patient Scar Assessment Questionnaire (PSAQ) (Durani et al., 2009). It is a reliable and valid measure of the patient's perception of scarring that has five subscales: appearance, symptoms, scar consciousness, satisfaction with appearance, and satisfaction with symptoms. Higher scores in each subscale reflect a poorer perception of the scar in the domain it pertains to. I have used the PSAQ in the past with another client who had similar feelings about her scars. I felt it could provide both myself and John with some further information that could be useful in my treatment approach, perhaps providing an opportunity for opening up dialogue that could support education and self-treatment and give us a baseline for measuring change. Comparing John's scores to mean groin/chest scores (Durani et al., 2009) as the most comparable group, all of John's scores were higher than these mean scores and were as follows: appearance 27/36 (mean 19.5), scar consciousness 14/28 (mean 12), satisfaction with appearance 22/36 (mean 14), and satisfaction with symptoms 17/24 (mean 7). The symptoms subscale does have reliability issues so was omitted. John was also above the median for all scores, particularly for appearance and satisfaction with appearance, which was consistent with the beliefs he expressed about his scars.

MANUAL THERAPY TECHNIQUES

While I use MFR and scar tissue release techniques I apply these within the context of focusing on the nervous system – dampening his sympathetic response and activating the parasympathetic response, rather than a mechanistic tissue-based approach that assumes that we are breaking down adhesions, releasing fascia or trigger points. I combine these with dermoneuromodulation (DNM) (Jacobs, 2016) and relaxation massage techniques including breath and body awareness, helping him experience gentle therapeutic touch to the areas which could reduce his perception of pull, tension and pain.

We often worked on his back, shoulders and neck first to help him relax. Using graded exposure (Jensen, 2011), scar treatment was done at the end of the session, for just around 5 -10 minutes using gentle pressure and stretch. Initially he could only tolerate touch to the area for a short duration but this became longer over 15 months. At one session he requested that I just focus on his scars. We gave this a try. I suggested that we begin with effleurage and pettrisage to help calm his nervous system and relax him, before going on to specific scar work, which he was happy with. Although at the end of the session he reported feeling really good and that it was beneficial, he reported at the next session that he had pain for several days after. He had also been through an intense period of work which had increased his stress levels, had not been able to find opportunities to be physically active or doing any breath focus or relaxation as he was tired and sore at the end of the day. He had also been worried that the area around his hernia on the left was bulging. His wife has reminded him that he had had this pain before and it had not meant it was bulging. At the end of the session we discussed how he could find ways to incorporate things he enjoys doing into his routine, movement snacks during his work day as bodies like to move and will signal louder and louder (with pain) when we don't move enough. I also explained it was likely it was too much all at once for his nervous system to cope with

and his scars were not used to having that much sensory input so his nervous system likely 'freaked out' as a result. If there is sensitisation it can react more strongly. After that I ensured we did not spend too long on the area, to avoid this happening again. We always end with general relaxation massage to his abdomen.

HOMECARE AND SELF-TREATMENT

Homecare and self-treatment suggestions I gave included relaxation/mindfulness techniques, belly breathing exercises, and experimenting with touching and connecting with the area (in the shower, using Dycem (a silicon material used in DNM) to the touch scars and apply some gentle stretch). Unsurprisingly this was the biggest challenge for John. While he was able to tolerate me touching the scars, it was 12 months before he was able to bring himself to touch them. Change can be a slow process, particularly when PTSD is a factor. It is likely John was in the pre-contemplative and contemplative stages of changing his behaviours and attitudes (Prochaska & DiClemente, 1983) for the first 11 months (figure 1).

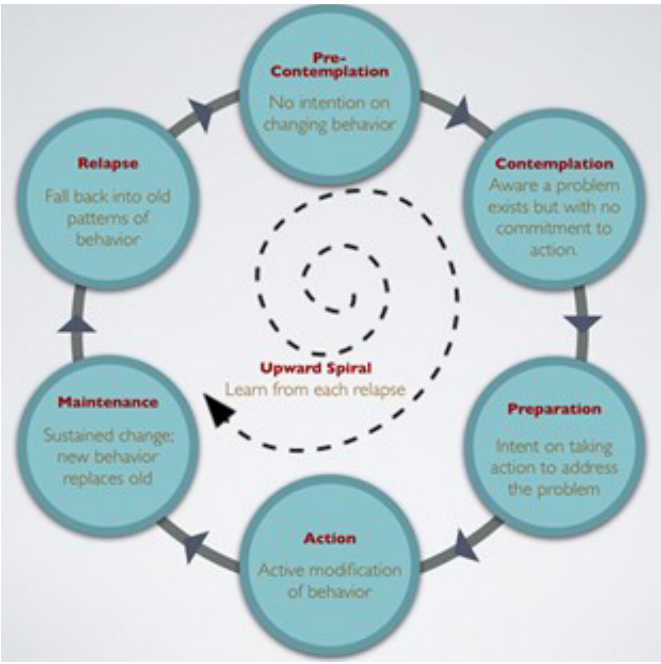

Figure 1
Stages of change

Note. http://socialworktech.com/2012/01/09/stages-of-change-prochaska-diclemente/

PSYCHOSOCIAL FACTORS

Six months into treatment, with John still reporting pain flares, I was interested to know if central sensitisation was a factor in his scar pain and hypersensitivity. Links have been made between central sensitisation and a history of trauma. The Central Sensitisation Inventory (CSI) is a self-report outcome measure designed to identify patients who have symptoms that may be related to central sensitisation (CS) or central sensitivity syndromes (CSS) (Gatchel & Neblett, 2018). Scores range from 0 (subclinical) to extreme (100). John scored 39/100 which is the upper range of mild, indicating that CS was not a strong factor in maintaining his pain. This likely meant we were not dealing with nociplastic pain /more deep-seated changes in his nervous system, but that his pain seemed to be more influenced by stress factors, which led me to spend more time explaining the stress response and strategies for managing this.

Another area that interested me was how much he worried about his scar pain. Pain catastrophizing is characterized by the tendency to magnify the threat value of a pain stimulus, feel helpless when experiencing pain, and feel unable to prevent or stop pain-related thoughts in anticipation of, during, or following a painful event. The Pain Catastrophising Scale (PCS) (Sullivan et al., 1995) is a valid and reliable measure for assessing this. Scores range from 0-52 and John scored 23/52 overall, while this puts him in the lower end of the high range (20-30), he is above the mean for men (16.4). For the individual variables he scored 6/16 for rumination (mean for men is 1.8), 12/12 for magnification which is high and clinically significant (mean for men is 1), and 5/24 for helplessness (mean for men is 1). His score for magnification reflected his belief that flares in pain may be due to something being seriously wrong that he would require more surgery for. On reflection of this tendency to think the worse, he relates this to being told by doctors that things were fine, only to end up back in hospital having more surgery. This opened up some discussions on the relationship between his stress levels and long and late work hours and pain, the possible impact of stress on his gut function – that digestion and gut function can be affected by a sympathetically activated nervous system and how stress reduction, regular movement and relaxation/ mindfulness techniques can be beneficial.

I also wondered if self-efficacy might be a factor at play in terms of his attitudes to his pain. I had him complete the Pain Self Efficacy Questionnaire (PSEQ). This self-report questionnaire assesses how confident people with ongoing pain are about doing daily activities when in pain (Nicholas, 2007). Scores range from 0-60 and John scored 54/60. Scores >40 indicate a high level of self-efficacy which was a positive factor for his coping. This was interesting, especially when seen alongside his Pain Catastrophising Scale (PCS) score for magnification which was clinically significant. I did wonder if these contradicted themselves in some way. He did show a tendency to push through pain when working. He could be in substantial pain working late into the at night at his standing desk but would have to keep on working because of the nature of his work.

MIND-BODY CONNECTION

During sessions I provided John with explanations about the relationship between the mind and body and how the stress response might be affecting his pain and beliefs about his scars. Going over the fear avoidance model (Vlaeyen et al., 2016) helped him understand how his mind freaking out of his pain might be affecting his behaviours and beliefs, especially when he thought a pain flare might mean the worst-case scenario. Teasing this out we came up with a checklist of things to go through in his mind first, before assuming the worst.

Promoting stress management strategies and increasing his variety of movement was also an important part of my work with him. Especially as his work required being at his standing desk for long periods, often late at night because his work was very high level and required working across different time zones. I explained that the human body likes movement variation, and that pain can be a way our nervous system tells us to change position. John noticed that when he was doing regular varied movement he felt better, his body was not as sore, he felt that he was doing something positive for his body, and his stress levels were lower. When he started doing some breath work regularly this also had benefits for his pain, tension and stress.

In late September 2021 John started using an exercise bike at home as well as his daily dog walks and swimming a few times a week. Then a breakthrough happened in October when he started doing some self-massage of his whole abdomen.

DESCENDING INHIBITION

In November I had just completed a neurobiology of pain paper and one day when we were working on his scars and he was experiencing a burning sensation I had the idea to give him a spikey massage ball to hold in his hand while I worked on the scars, to see if it helped with distracting him from this sensation. We were both surprised that doing this reduced the burning sensation instantly and substantially. My theory for this was a combination of gate control (Melzack, 1996) and conditioned pain modulation (Nir & Yarnitsky, 2015), which activated descending inhibitory mechanisms in his nervous system that reduced his perception of pain.

When doing the general abdominal massage at the end of the session I did something I had done early on in the treatment sessions, which we had dropped because it could increase his sympathetic response. I had him place his hand on mine as I massaged the area. I had him control the depth of pressure and was surprised that he used more pressure than I had been using.

John was keen to do more self-massage at home to work on desensitising himself and feel less of a threat response. We talked about using a spikey ball at home and seeing what happens. We have continued to use the spikey ball at treatment sessions with the same effect and we finish with us massaging his abdomen together with him controlling the depth. I have also suggested that he try this at home with his wife at some stage.

RECENT THERAPEUTIC CHANGES

Some other recent things we have been able to do is explore his subjective attitudes about his scars in comparison to other similar scars. I collated a selection of similar scar photos, including photos of his scars. I had him rank the photos from most acceptable to least acceptable in appearance. Photos of drain scars, including his own did not bother him at all now, and he rated his long scar as the most acceptable out of all the scar photos. We discussed how he feels about his scar compared to 12-18 months ago, and he said it does not worry him so much, and now feels it is part of him. This was a big shift for him.

We also explored his aversion to different fabrics and textures on his scars as this had been problematic for him from early on. I created a chart with photos of a range of textures and fabrics – from rough loofah and body brush textures, to various types of wool, cotton, microfibre, soft lycra and satin type fabrics, and skin touch. I also provided space in the chart for him to include some other textures of his own. His task at home was to imagine the feel of these textures on his scars and then rate each one on a 'yuckiness' scale, 0 being not yucky at all and 5 being the most yucky. When I saw John at the next session, he reported that his wife had been very keen to get him to actually try the textures on his scars! I must admit, my first thought was that this could have gone horribly wrong. However, he had gone with it and tried most of them, something I did not expect he would do. This was more evidence that he was becoming less aversive to contact with his scars. His ratings for the textures are in table 3.

Table 3

TEXTURES EXERCISE

Yuckiness score	Texture/fabric
0	Microfibre, leather (his own choice)
1	Cotton sheet, silk/satin
2	Lycra, skin touch
3	Soft body scrubber, sweatshirt fabric, fine soft wool, fleece (his own choice)
4	Towelling
5	Rough loofah, soft body brush, thick wool

Applying a graded exposure approach, his next tasks are:

1. Try having his wife place her hand on the scars with his hand on hers as we do in massage therapy. Begin with static touch before introducing dynamic touch.

2. Introducing some skin contact with some of the textures in the 3-4 range, seeing how they feel just held against his skin, then trying another non-threatening area, and next on the scars.
3. Think about contact with some of the textures in the 4-5 range.
4. Introduce some skin contact with some of the textures in the 4-5 range, holding them in his hand first, then trying them elsewhere on non-threatening areas, and finally on the scars.

We don't have timeframes for these so they will be at his pace and when he is ready, to ensure he does not feel disempowered.

I recently had John complete the PSAQ and PCS again, to see if his progress is reflected in these. For the PSAQ there have been some very noticeable changes in his perception of his scars (figure 2). His scores for appearance, satisfaction with appearance and satisfaction with symptoms have all decreased considerably reflecting that they do not concern him as much as they did over 12 months ago. His score for scar consciousness has increased noticeably. This may be due to the fact he is swimming regularly at the public pool, so there are more instances for others to see his scars. See Figure 2

PCS scores have also changed, with a slight decrease in his total score and a slight increase for helplessness. A decrease in magnification may reflect changes in his thinking the worst about his scar pain. See Figure 3

We are still working on the textures and increasing John's sensitivity to them. He has come a long way from when I started working with him 16 months ago. This is testament to his willingness to work at feeling less threat and fear and change his attitude to his scars. Building a solid therapeutic alliance has been so important. I have learnt more about letting the client determine the speed of treatment, working with the client where they are at, integrating neurobiological concepts and explanations as part of client education and homecare.

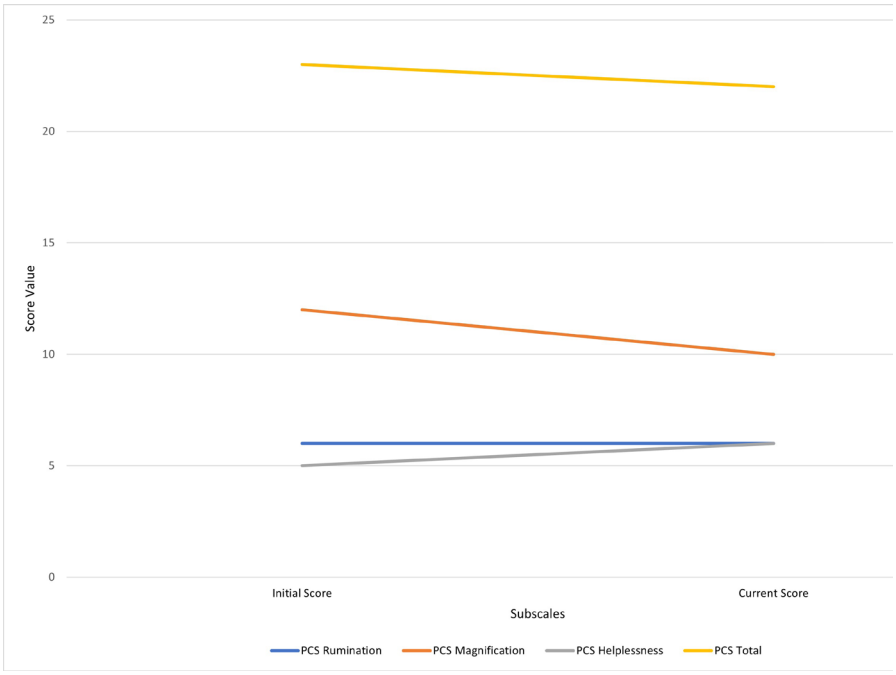

Figure 2
PSAQ Score Changes from Initial to Current

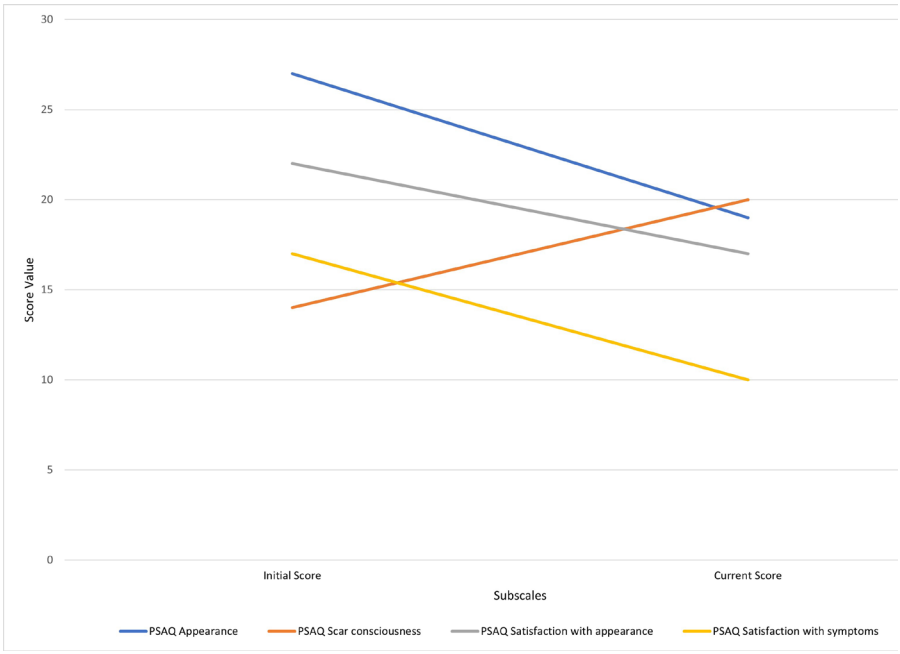

Figure 3
PCS Score Changes from Initial to Current

My 'take-home' messages for massage therapists who may have clients with scars and scar-related pain linked to past trauma are:

- Take time to hear their story and really understand it. They may be very wary of health professionals because of their previous experiences so ensure you take time to gain their trust.
- Communicate! Explain what you are going to be doing and why and allow them time to mentally prepare, this reduces the likelihood of a startle response. Check in with them during the session to ensure they are not being triggered or dissociating.
- Include relaxation and mindfulness techniques in your sessions. Getting them to focus on their breath is a simple and useful tool for helping them to be present and in their body during the session.
- Focus on their nervous system first and foremost, if you only address tissues you are missing a vital part of the puzzle. Updating your knowledge on neurobiology is a very valuable knowledge addition to your practice.
- Be prepared to take your time and go at the client's pace. Sometimes there may be what seems like very little 'progress', but your view of progress may be very different to theirs.
- Give them permission to say what they want in the session, so they do not feel disempowered.
- Don't push them to make changes they are not ready for yet. They need to contemplate change before they can turn it in to action.
- Don't be afraid to be creative.

I feel incredibly privileged to be working with John and being part of his journey. The changes he is experiencing are a testament to his willingness to challenge himself to work at making changes that can help him integrate his past trauma and feel more connected to that part of his body that he previously felt so disconnected to.

ACKNOWLEDGEMENTS

I am very grateful to my client for being so willing to participate in this piece by sharing his lived experience so that MNZ Magazine readers might be able to gain some insight that can benefit them when working with clients with trauma and pain. I am also grateful to my supervisor Dr Bronnie Lennox Thompson, for suggesting that I write up this work I have been doing with my client and sharing it via the magazine.

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