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MASTERCLASS

A process approach in osteopathy: beyond the structural model

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Abstract The innate capacity of the body/person for self-recovery and healing is a key concept in osteopathy and the basis of clinical management for a broad range of conditions. It is believed that health and functionality can be improved by supporting the person's self-recovery processes; in particular, by removing structural and biomechanical obstacles that may impede the body's capacity to engage effectively in recovery. This clinical approach and its supporting conceptual framework are often referred to as the Structural Model. However, research findings in the last three decades have challenged the plausibility of the Structural Model and imply that the role of osteopathy in supporting health and recovery needs to be reconsidered. In response to these findings an alternative management called a *Process Approach* is proposed. This approach aims to directly support the processes associated with recovery; namely, *repair*, *adaptation* and *alleviation of symptoms*. This Masterclass article will discuss the current scientific challenges to the Structural Model in Osteopathy, the physiological, practical and therapeutic limitations of this model in supporting recovery processes and present the reasoning and principles of the Process Approach in osteopathic care.

Introduction

The innate capacity of the body/person for self-recovery is a key concept and basis for osteopathic care.[1–3] It is believed that obstacles to self-healing can arise from faults, misalignments or imbalances within the body's structure.[4,5] By removing these structural obstacles damaging stresses can be minimised and physiology improved.[1,3,5] When achieved, this idealised structural state would help self-healing; prevent the development of pathology and support health and well-being. It could also reduce the energy

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costs to the system; energy that can be 'utilised elsewhere' for self-healing.[2] This form of care is the basis of the Structural Model in osteopathy. This model is often used to rationalise the cause of the patient's complaint as well as to justify the clinical management.

In the last decade Lederman[6,7] has proposed an alternative basis for osteopathic care based on direct support for self-healing called a Process Approach. This approach shares the view that the body/person has the capacity for self-healing. However, the focus is to identify the dominant processes associated with the individual's recovery. Once identified, the aim is to explore with the patient environments that support these innate recovery processes. This is where a Process Approach takes a different therapeutic vector from the traditional Structural Model. In a Process Approach the management is aimed directly at supporting the recovery processes rather than indirectly through influencing biomechanics, structure/anatomy or posture as proposed by the Structural Model. A Process Approach in osteopathy is informed by and developed from biopsychosocial sciences[8] and evidence based medicine. This approach enables an effective integration of these sciences into osteopathic practice.

Why do we need a new clinical model?

The foundation for a Structural Model has largely remained a hypothesis widely accepted within the osteopathic profession. However, current research has eroded the foundations of this model. There is a large body of evidence demonstrating that perceived asymmetry, imbalances or postural deviations are normal biological variations and not pathology.[9] Research in this field has demonstrated that the cause of many common musculoskeletal and pain conditions cannot be explained by biomechanics, structure or even posture.[9–11] This applies to a wide range of conditions commonly seen in osteopathic practice. Included are acute and chronic low back and neck pain,[9,12,13] shoulder conditions such as impingement, frozen shoulder and cuff tears,[14–16] tendinopathies,[17] pain conditions in the upper half of the body including various periscapular pain conditions and all forms of headaches.[13,18–21] Studies in the area of musculoskeletal conditions have failed to demonstrate an association between structure and the development of different conditions. This implies that structural modifications/adjustments are unlikely to be therapeutically useful in this group of conditions.

Another issue that has not been addressed in osteopathy is the practical limitation of inducing structural change by manual means. The assumed anatomical changes brought about by osteopathic techniques are physiologically unattainable. The forces produced by manual techniques and duration of exposure to these physical challenges are far below the requirements for long-term adaptive changes.[7] For example, the loading forces that are needed to drive connective tissue adaptation are often many times higher than the force that can be produced by manual techniques.[22,23] This suggests that there is some biomechanical loading threshold for adaptation to take place. Without this threshold, tissues would become progressively lax or tear by the forces imposed by muscle contraction and the physical stresses of daily activities.[24–27] Furthermore, long-term tissue and neural adaptation requires prolonged exposure to specific activities[28–32]; durations which are unachievable in the relative short clinical session. To induce an adaptive tissue change the manual forces have to reach a level which is at least encountered during daily activities (but probably higher) and repeated daily over several weeks or months.[7,33] Even if we accept the argument that musculoskeletal conditions can be improved by biomechanical/structural change the practitioner would still face the clinical hurdle of how to achieve it by manual means.

The lack of causal relationship between structure and posture and the development of various conditions as well as the unattainably of structural change by manual means suggests that osteopathy should explore other approaches. A possible solution is to explore how osteopathy can be used to directly support the body/person processes that underlie recovery.

The three recovery processes

A Process Approach takes the view that a person can recover from their condition by three principal processes, namely: *repair*, *adaptation* and *alleviation of symptoms* (Fig. 1). For example, if a person sprained their ankle or had surgery they would be expect to recover their functionality[1] through a process of tissue repair.[34–37] On the other hand, if a person was immobilised following an ankle fracture it would result in multisystem adaptive changes affecting vascular, lymphatic

[1] The ability to perform daily activities effectively, efficiently and comfortably.

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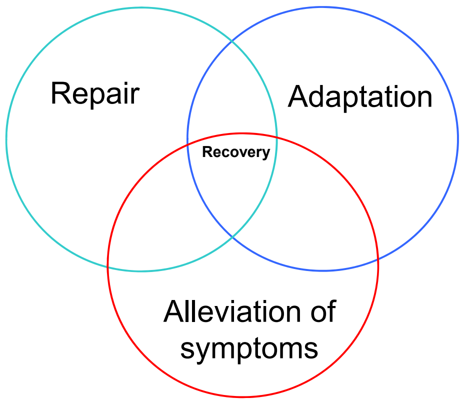

Fig. 1 The three recovery processes. Recovery from most musculoskeletal and pain conditions is associated with one or several of these processes.

systems, connective tissue and muscle tissue and motor control.[38–41] Subsequently, the individual's functional recovery after removal of the cast will be dependent on adaptive biomechanical/physiological tissue changes and central nervous system plasticity/adaptation.[6,38,42,,43] Here however, recovery is associated primarily with adaptive processes and less by a repair process.

In the next example a person is experiencing chronic back pain for several months. Within a few weeks of treatment there is a dramatic improvement in their condition. If a MRI scan was taken before treatment and another, several weeks later when the patient is pain-free, it would be likely that the MRI findings will remain unchanged.[44–49] It can therefore be assumed that their recovery is related to attenuation of their symptoms rather than by tissue repair or adaptation.[50–52] This symptomatic improvement is brought about by a complex mix of biological, psychological and behavioural factors that influence the experience of pain through different central inhibitory mechanisms.[53–58] Under these circumstances the patient would consider their back condition to be fully recovered as they are now able to carry out daily activities without pain. Hence, another form of recovery is through symptomatic change while the underlying pathology remains unchanged. An example of this recovery process is demonstrated in a case of shoulder injury, see Fig. 2.

The three recovery processes can be readily identified in many conditions. In most acute injuries and post-surgery conditions repair is likely to be the principal recovery process, particularly in the first 1–3 weeks after onset; depending on tissue involved and extent of damage.[59] Recovery by repair includes conditions such as acute spinal and disc injuries and joint/capsular-ligamentous sprains/strains and muscle tears.[6]

Recovery by adaptation is associated with chronic conditions where movement losses are due to tissue and motor control changes. Included are post-immobilisation conditions, long-term contractures after injury and surgery and stiff phase of frozen shoulder.[60–63] Functional recovery in chronic central nervous system damage such as stroke and traumatic head injuries is also associated with central nervous system plasticity as well as peripheral adaptive processes such as muscular hypertrophy.[43,64]

Symptomatic related recovery probably plays an important role in recovery from chronic conditions such as low back and neck pain;[44,46–49] symptomatic relief in osteoarthritis,[65–67] improvements in painful tendinopathies[68–70] and other unexplained local and regional whiplash associated pain conditions.[71,72]

It should be noted that symptomatic recovery is not limited to pain experience. It includes other symptoms of 'dis-ease', such as stiffness, paraesthesia and affective experiences such as anxiety and depression.

Overlapping processes

In many conditions recuperation is associated with a combination of recovery processes. This is depicted by the overlapping areas in Fig. 1. The overlap between repair and adaptation represents the recovery associated with remodelling of tissues after injury. Initially, repair is dominated by an inflammatory/immune response that in time shifts towards regeneration and later remodelling processes.[59] These latter processes are largely adaptive in nature associated with mechanotransduction and different from the early inflammatory phase of repair which is associated with an immune response.[73–81] This overlap also demonstrates the possibility for dominant recovery processes to change over time; in this example, from repair to adaptation (Fig. 3).

The overlap between repair and alleviation of symptoms is often seen in recovery from acute conditions. This recovery is partly by resolution of inflammation and attenuation of nociceptive excitation at the site of damage. Some of the symptomatic improvement is also associated with diminishing central sensitisation and a parallel attenuation of allodynia and hyperalgesia in local tissues; damaged and undamaged.[52]

The recovery associated with alleviation of chronic pain is represented by the overlap between alleviation of symptoms and adaptation. Often chronic pain is associated with central

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Fig. 2 Recovery by alleviation of symptoms. This patient has extensive glenohumeral (GH) joint pathology including complete rapture of GH capsule and tears of supraspinatous and long head of biceps (A). Despite this extensive pathology and after six weeks of rupturing his biceps tendon the patient was pain-free and returned to playing tennis. Three years after the injury he is still playing tennis regularly, without any shoulder pain (With permission from the patient).

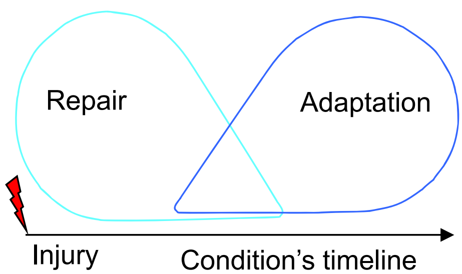

Fig. 3 Transformation and overlap of processes from repair to adaptation.

sensitisation, a process related to neural plasticity and adaptation.[52] This overlap represents the recovery in conditions such as chronic spinal pain, long-term postoperative pain or regional pain syndromes. Recovery in these conditions is likely to be due to long-term desensitisation; a process also associated with neuroplasticity.[52] Such adaptive processes have been demonstrated recently in patients with chronic arthritic pain. It was shown that the numbers of opiate receptors in patients' brains increased and was associated with alleviation/modulation of pain experiences.[82]

In clinical practice, several of these processes overlap in any given condition. However, often one of these three processes tends to dominate the person's recovery. The possible relative contribution of each process in various conditions is depicted in Fig. 4a—c.

Recovery environments and behaviour

The management in a Process Approach aims to explore with the patient environments that will support their recovery. But how is this management achieved? What are the recovery environments modelled on?

To answer this we need to reflect on the self-healing proposition. When a person is faced with the experience of injury, pain or loss of functionality they tend to modify their behaviour. The role of this specific behaviour is to support the underlying physiological process associated with recovery, e.g. reducing weight-bearing activities (behaviour) on a sprained ankle (tissue damage and inflammatory process). This behaviour is part of a multidimensional protective/recovery strategy. This whole person strategy is termed here the '*recovery response*' and the behaviour associated with it the '*recovery behaviour*'. Generally, what humans do naturally to recover functionality seems to be well supported by movement rehabilitation research and pain sciences.

A Process Approach assumes that clinical management is only possible because these natural recovery processes are already present in the person. In this approach, the osteopathic management revolves around identifying and amplifying/attenuating various elements within the individual's environment in order to support the recovery processes.

Modelling a repair environment

The repair environment can be modelled on the healthy, optimal recovery behaviour of an individual when injured. Under ideal conditions, the behaviour associated with repair is marked by a

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short period of withdrawal from physical activities that are potentially damaging. This corresponds to the inflammatory phase of repair when tissues are at their most vulnerable state. This period is followed by a regeneration and remodelling phase and is matched by activities that gradually load the affected areas; a behaviour that optimises recovery of the tissues' physiological and biomechanical properties.[77,83–88] This behaviour implies that management of acute injuries could include manual techniques that emulate this physical environment, i.e. providing moderate repetitive loading to the affected area. This can be in the form of passive or active mobilisation techniques or active movement challenges gradually applied to the affected area.

This management modality can be applied to a wide range of conditions including post-surgery care, connective tissue, muscle and joint injuries, disc prolapses or any other acute condition. However, within a short period from onset (approximately 2–3 weeks) the repair process tends to transform into an adaptive process suggesting a shift in management.

Modelling an adaptation environment

Adaptive processes are profoundly influenced by the recovery behaviour. Take for example, ankle joint contractures and range of movement limitation following immobilisation in a plaster cast. Under normal healthy circumstances (and in the absence of a helping hand) the individual will attempt to execute activities which matter to them most, such as standing and walking. This behaviour of carrying out movement which resembles the intended activity is called 'task specific practice' or 'task specific rehabilitation' when applied as a therapeutic intervention.[43] Added to the task specific behaviour, the person will gradually increase the physical loading (overloading) on that limb as well as extend the time spent in these activities (repetition), see review Lederman.[7]

This recovery behaviour provides important insights about the nature of an adaptation-supporting environment. The management strives to be active rather than passive. There is strong evidence that active movement provides the necessary loading forces required for tissue adaptation.[22,23,33,89] Furthermore, motor control recovery is highly dependent on active, task specific movement.[90–97] Motor control research suggests that movement should resemble daily activities selected from the individual's movement repertoire.[7,43,97] For example, range of motion losses due to ankle joint contracture could be rehabilitated by amplifying daily activities that challenge these movement deficits, such as walking or the use of stairs. However, rehabilitation is generally less effective when the movement or manual techniques are passive or dissimilar to the individual's functional goals.[7,43,98] For example, core stability exercises are dissimilar (extra-functional) to daily activities; and hence such training, fails to carry-over any gains to the performance of daily and sports activities.[99,100]

Modelling an alleviation of symptoms environment

The question that comes into mind here is what actions do individuals take in order to alleviate their pain/symptoms; and can this behaviour be supported/amplified as part of an osteopathic management?

To explore pain modulating environments the nature of acute and chronic pain needs to be considered. Often acute pain has a clear protective biological role to prevent further tissue damage. Chronic pain, on the other hand, has a more obscure biological role, as underlying tissue damage may not be evident or necessarily the source of pain.[52,101] This suggests that in acute conditions the therapeutic aim is to support repair (as discussed above), rather than alleviating pain. It would be expected that the pain experience will attenuate in line with the resolution of repair. Hence, the management in acute pain conditions can follow the principles proposed for supporting the repair process, as outlined previously.

In chronic pain conditions, where pain has an obscure role, the management can focus directly on pain alleviation and return to functionality. In this situation, the symptom alleviating environment is also modelled on the recovery behaviour: maintaining daily activities, introduction of progressive physical challenges (overloading, repetition) and using the individual's own movement repertoire (specificity), when possible.[7,102,103] Concomitantly, engaging in a positive therapeutic relationship with the patient, providing support, reassurance and empowering information can play an important role in management of persistent symptoms.

The role of osteopathic manual therapy in alleviating symptoms may be associated with touch effects and 'soothe-seeking' behaviour.[6,118] It has been observed that when individuals are in distress or pain they will often seek to alleviate

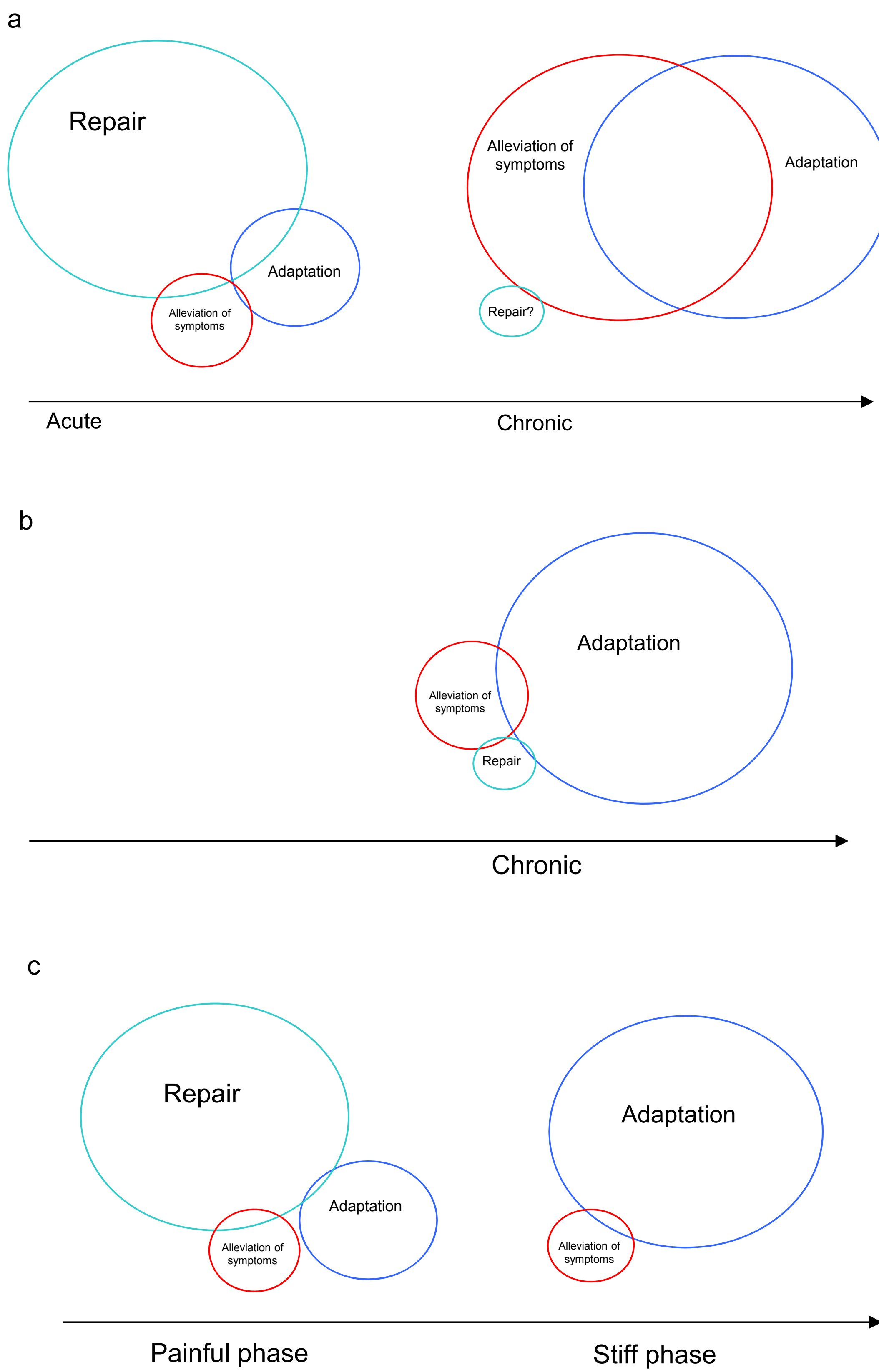

Fig. 4 (a). Possible processes associated with recovery in acute and chronic low back pain. The overlap between alleviation of symptoms and adaptation represents CNS plasticity associated with recovery in chronic LBP. The Size of the circles depicts the possible relative contribution of each recovery process in acute and chronic conditions; (b). Processes associated with functional recovery after immobilisation. Size of the circles depicts the possible relative contribution of each recovery process in recovering range of movement following post immobilisation; (c). Processes associated with recovery in frozen shoulder. Size of the circles depicts the possible relative contribution of the processes associated with functional recovery in the painful and stiff phases of frozen shoulder.

Table 1 Alleviation of symptoms. Care-giving and care seeking behaviour and clinical parallels.

Care-seeking/giving behaviour	Clinical parallels
Care-giving and care-seeking	Therapeutic relationship
Soothing-calming anxieties Reassurance	Cognitive behavioural tools Reassurance Counselling skills Diffuse descending inhibition
Compassion, empathy	Compassion, empathy, mirror neurons
Distraction from symptoms (physical or cognitive)	External focus of attention
Touch	Manual techniques, massage, soft-tissue manipulation, cranial Diffuse descending inhibition
Rubbing affected area	Massage Superficial proprioception stimulation Mechanoreceptor-nociceptive gating mechanisms
Holding and rocking	Mobilisation techniques, Harmonics, Deep proprioceptive-vestibular stimulation Mechanoreceptor-nociceptive gating mechanisms

these experiences through social and physical contact with others, e.g. touch.[102,104–106] This behaviour contains psychological as well as physical components that are partly 'hard-wired' within human behaviour and reinforced in childhood through the parent-child relationship.[104,107–114] When a child (care-seeker) experiences pain they will actively seek to soothe it by contact with a significant other/parent (caregiver). In response the parent will often use a soothing, caring tone of voice and body manner that invites closeness and contact with the child. The child's anxieties are often soothed by cognitive rational means ("you'll be alright; it's only a small cut"). The parent/care-giver will often make some form of physical contact with the child, habitually lifting and rocking the child or rubbing the painful area.[115–117] Within this interaction empathy and compassion play an important role in supporting self-regulation and alleviation of symptoms. It is likely that this care-giving and care-seeking behaviour is mirrored within the therapist-patient relationship (Table 1); where elements of this interaction are amplified in clinic to provide pain alleviation.[6,118]

Osteopathic care: a multidimensional recovery environment

The management in a Process Approach aims to co-create with the individual environments in which recovery can be optimised. The supporting environments involve management strategies which are unique to each recovery process as well as management that is shared by all three processes (Table 2). This environment contains physical (osteopathic technique, movement challenges), behavioural, psychological-cognitive and social-cultural dimensions (Fig. 5).

The recovery processes are heavily influenced by the individual's physical-psychosocial environment. These factors support the exposure to beneficial movement challenges as well as having important psychological influences. These can have a positive effect on well-being and directly contribute to the alleviation of symptoms.[102,119–121] For example, adaptation requires tissue loading and frequent exposure to physical stresses. These physiological needs can only be met when the individual engages in activities that provide such challenges. However, the individual's cognitions about their condition, psychological state and social-cultural factors may influence their level of engagement in recovery behaviour.

Consider an individual who had a plaster cast removed after ankle fracture. Their functional recovery will be highly dependent on weight-bearing activities such as walking and climbing stairs. This behaviour, in turn, depends on cognitive and psychological factors, motivation, needs and functional goals ("get back to work, be able to play tennis again", etc.). But this recovery behaviour is also dependent on multiple environmental factors. They include social (going out with friends), occupational (walk to work), and recreational opportunities (cycling, running).

Role of osteopathic technique in a process approach

The role of hands-on, osteopathy is redefined in a Process Approach. As discussed previously, in a

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Table 2 Specific and shared management of the three recovery processes.

Process	Specific management	Shared management
Repair	Movement applied locally to affected area Moderate cyclical and repetitive loading Pain-free/tolerable movement Gradual challenge/loading Can be either active or passive Any movement pattern but preferably functional. Extra-functional is OK	**Psychological** Ease movement and pain related anxieties, catastrophising, Support, reassure, comfort, Sooth and calm Therapeutic relationship - trust, non-judgemental, empathic
Adaptation	Active Task specific Functional tasks High frequency and duration of exposure to challenges Gradual overloading Discomfort likely and generally OK	Contextual factors **Cognitive** Inform Plan Set goals Provide choice **Behavioural**
Alleviation of symptomatic	Dependent on patient expectations Active may be better than passive movement Cyclical may be better than static movement Functional or extra-functional	Support recovery behaviour Raise awareness to avoidance behaviour **Physical** Ideally functional movement Frequent exposure to challenges

Structural Model manual techniques are often used to correct or remove an obstacle in the structure. In a Process Approach manual techniques are used to support the underlying recovery process. They are part of the recovery environment.

In a Process Approach osteopathic manual techniques are viewed as a vehicle to deliver touch effects. These can have positive influence on sense of self, well-being and body image. Touch effects can also have a profound calming-soothing influence on the individual. Passive or active mobilisation of the affected area by the therapist can provide implicit reassurance that movement is safe. Taken together, all these factors can support recovery; particularly for alleviation of symptoms and pain.

Osteopathic manual techniques (passive or active) that provide local or more general movement can be used to support tissue repair processes. This could be in situations where the patient is unable to engage in recovery behaviour due to pain, physical incapacity or movement related anxieties.

There is a clear message from research that osteopathic techniques, in particular passive techniques, have little or no effect on tissue adaptation or neuromuscular/motor plasticity.[7,43,118,122,123] In this area, osteopathic techniques can be used for guidance or to support active movement performed by the patient. For full discussion and demonstration of active osteopathic management in clinic see Lederman.[43]

In a Process Approach manual management can be an important therapeutic tool. Table 2 provides some suggestions about matching the most suitable techniques/management to the individual's recovery process. Table 3 summarises some of the main features and differences between the Structural Model and Process Approach in osteopathy.

The recovery environment and self-care

The three recovery processes are highly dependent on frequent and extended exposure to the environments that support them. For example, processes such as adaptation associated with immobilisation requires several hours of daily activities to challenge and enable range of motion recovery.[122] The weekly clinical contact time with the patient or even the addition of a structured exercise regime is unlikely to provide the necessary stimulation to support these processes.[7] After all, there are 168 h per week and rarely treatment extends to more than 1 h of that week. This leaves us with the question what happens in the remaining 167 h; in which realm does recovery occur? It suggests that what the individual does within their environment plays a critical role in their improvement. The osteopathic clinical session provides the initiation, management, proactive framework and the impetus for the patient to engage physically and psychologically in these recovery processes. The question that remains is in

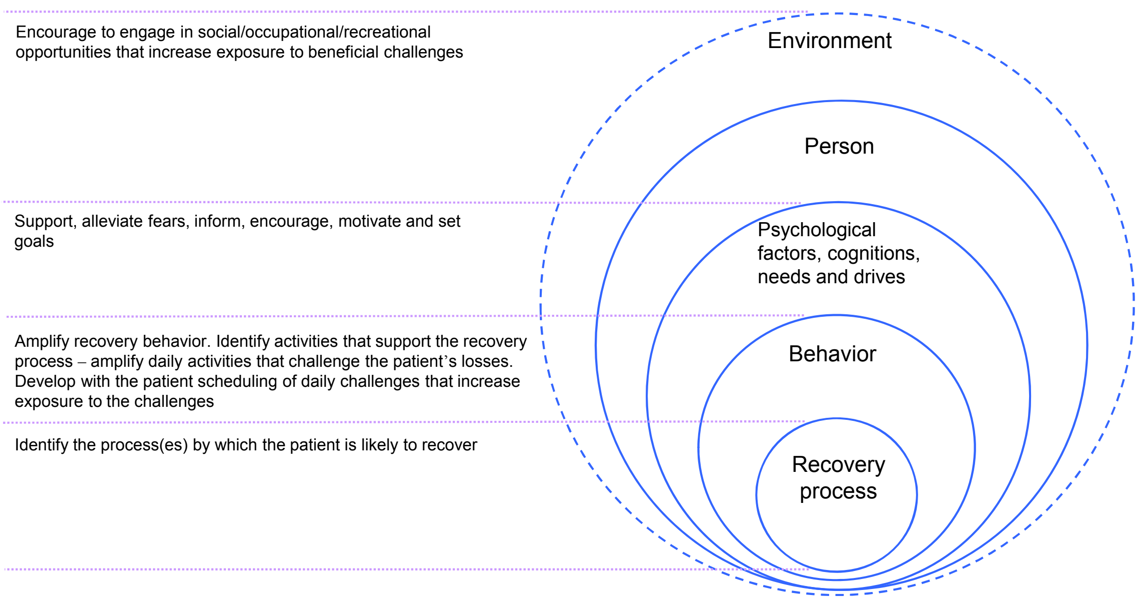

Fig. 5 Multidimensional management. The recovery processes are highly dependent on the actions that a person takes within their environment. These factors need to be acknowledged and addressed in the management. Adapted from Lederman E 2013[7] Therapeutic stretching: towards a functional approach.

what activities should the patient engage beyond the session?

Traditionally in osteopathy, self-care follows the aims of a Structural Approach. Improvement in functionality and alleviation of symptoms are believed to be attainable by exercise that promote structural and biomechanical change, e.g. adjusting, balancing, strengthening specific muscles, fixing, repositioning, realigning, resetting and postural and movement correction. This is reflected in the exercises by which these goals are pursued. Structural orientated rehabilitation often contains movement or activities that are outside the individual's experience (extra-functional) and dissimilar to a recognisable functional daily movement (see reviews, Lederman[7,43,99]). These practices often promote ineffective and inefficient practices such as separation of movement from its goal; focussing on particular muscles, muscle groups or chains (e.g. core exercise, scapular stabilisation and muscle-by-muscle rehabilitation). Often movement is fragmented into smaller components, e.g. working specifically on knee extension strength in sitting to improve walking. However, research suggests that such extra-functional practices have no advantages for recovery over increased engagement in daily activities,[90–97] see reviews, Lederman.[6,7,43,99]

A Process Approach proposes a different self-care management that is process focused and evolved from the individual's own movement repertoire (termed *Functioncise*, see Ref. 7,43,99). These movement challenges are then integrated into the patient's environment and daily activities. The movement challenges are selected from daily activities that are shared by the individual and others (walk, stand, sit, etc), as well as from their unique recreational or occupational repertoire. For a person who is recovering from a knee injury and is unable to walk or climb stairs, the management will be to gradually challenge walking, and then stair-climbing, etc. If they play tennis this activity will also be incorporated in the management (for full discussion on this form of management see Ref. 43).

Engaging the individual in 'functioncise' provides several important benefits. The individual is using their own movement resources; what they already know and recognise. They are not required to learn new exercise regimes which take time and effort, are often costly and unachievable for most patients (e.g. learning to contract specifically the core muscles). A functional management seldom relies on any specialized exercise equipment or set-aside time for exercising. The remedial movement challenges are integrated into the person's daily activities; they can be practised anywhere and at any time. This approach uses the patient's own recovery goals. It empowers them to self-care and supports adherence to the recovery programme.[124–131] Hence, in a Process Approach self-care management is person-centred and highly individualised; congruent with osteopathic philosophy and patient-centred care.

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Table 3 Main features and differences between the Structural Model and Process Approach in osteopathy.

Structural Model	Process Approach
Self healing/recovery premise	Self healing/recovery premise
Management focuses on creating ideal biomechanical conditions for recovery	Management focuses directly on environment that support the recovery processes
Manual techniques or physical activities aim to correct structure or biomechanics	Manual techniques or physical activities support recovery processes
Medical diagnosis + biomechanical and anatomical considerations	Medical diagnosis + by which process will the individual improve
Tissue causing symptoms	Identifying underlying recovery processes. Tissue identification not essential for management
Therapist or clinically determined management goals	Patient determined management goals
Structural change as therapeutic target	Patient determined functionality as therapeutic target
Management largely in the biomechanical dimension	Multidimensional management
Pathologising normality (postural deviations, asymmetries, imbalances, weak muscles, etc.)	Focus on pathways/opportunities to recovery. Positive messages and empowerment
Recovery occurs during the clinical sessions	Recovery occurs in the individual's environment
Therapist dependent outcome/external locus of health	Emphasis on self-care, independence, autonomy, internal locus of health
Exercise dissimilar to human movement (extra-functional)	Functional management created from the patient's own movement repertoire
Education — focus on anatomy/structure/biomechanics	Education — focus on whole person processes

Summary

This Masterclass article discusses the main principles of a Process Approach in osteopathy. This approach aims to explore with the patient environments that support the processes that underlie functional and symptomatic recovery. A Process Approach identifies three key processes associated with recovery: repair, adaptation and alleviation of symptoms. The environments that support these recovery processes are multidimensional. They contain physical, psychological, cognitive, behavioural and social elements. They include management that is shared by all three processes as well as treatments that are unique and process specific. The management incorporates hands-on support, exploring movement beneficial for recovery, psychological support, working with cognitions, raising awareness to avoidance and recovery behaviour as well as exploring social and physical environments that assist recuperation.

A Process Approach takes a different therapeutic vector from the traditional Structural Model in osteopathy. In a Process Approach the management is aimed directly at supporting the recovery processes rather than indirectly through influencing biomechanics, structure or posture as proposed by the Structural Model.

A Process Approach can be a useful practical tool for integrating biopsychosocial and medical sciences into osteopathic care.

Conflict of interest statement

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Ethical approval

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