Ideas, properties, and standards of fracture repositioning with osteopathy in traditional Mongolian medicine in China

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Abstract

OBJECTIVE: To explore the unique ideas, properties, and standards of fracture repositioning with osteopathy in traditional Mongolian medicine in China.

METHODS: Based on the natural life concept of "integration of universe and man," osteopathy in traditional Mongolian medicine in China uses the modern principles and methods of physiology, psychology, and biomechanics. Against this background, we explored the unique ideas, properties, and standards of fracture repositioning in traditional Mongolian medicine.

RESULTS: Fracture treatment with osteopathy in traditional Mongolian medicine in China is based on (a) the ideas of natural, sealed, self and dynamic repositioning of fractures; (b) the properties of structural continuity and functional completeness; (c) the standards of "integration of movement and stillness" and "force to force."

CONCLUSION: The unique ideas, properties, and standards of fracture repositioning with osteopathy in traditional Mongolian medicine in China have resulted in the widespread use of such techniques and represents the future direction of the development of fracture repositioning.

INTRODUCTION

Repositioning is the most important factor in successful fracture fixation and healing. Although the techniques of fracture repositioning have progressed, functional defects and resultant psychological disturbances caused by repositioning with manipulation remain problematic. For example, the well-known athletes Yao Ming and Zhao Ruirui were forced to end their athletic careers because their physical function did not return despite having undergone the most effective known fracture therapies. Fracture repositioning with
osteopathy in traditional Mongolian medicine in China has the advantages of accurate repositioning, rapid healing, good recovery, and low cost without increasing the incidence or severity of trauma, bony membrane damage, or circulatory disturbances. In the development of fracture repositioning methods, more importance has been historically attached to technical applications than to perceptual cognition and theory. No importance has been attached to exploration in the life sciences. Against the present background of natural therapy, natural drugs, and traditional medicine, we herein reconsider the concepts of fracture repositioning with osteopathy in traditional Mongolian medicine in China. This topic is of important theoretical and practical significance.

Unique concepts of fracture repositioning
Fracture repositioning performed with wine-spraying massage and manipulation is one of the unique osteopathic therapies used in traditional Mongolian medicine in China. Mongolians living in the northern part of China, which is characterized by a cold, damp climate, have established a wine culture. These residents have long been aware of the peculiar curative effect of wine on fractures. Research has shown that wine-spraying massage can dispel heat, eliminate swelling, stop pain, and promote circulation of Qi and blood at the fracture site to strongly stimulate the human desire for self-healing and a balanced physiological and psychological state (the "exciting state" in clinical descriptions and the "stress state" in modern medical descriptions). The appropriate conditions for repositioning with manipulation are thus created.

Fracture repositioning with manipulation originated from human practice. The lifestyle of Mongolians has provided unique conditions supporting the development of osteopathic manipulation. Master Bao Jinshan, the fourth-generation successor to the aristocratic family practicing the osteopathic techniques of the well-known Horqin Bao, has summarized his experience. He explains that cross fractures are repositioned with traction, spiral fractures with twisting pressure, oblique fractures with grasping pressure, comminuted fractures with a kneeling grasp, insertion fractures with a hooking pull, torn fractures with pinching pressure, protruding fractures with pushing pressure, sunken fractures with a lifting push, separated fractures with a grasping push, and overlapping fractures with abutting union. Clinical practice has confirmed that the 10 above-mentioned fracture therapies are reasonable and effective.

For patients with good physiological and psychological states, fracture repositioning is performed by manipulation of the unifying "active force" at the distal fracture end and the "reactive force" at the proximal fracture end along the counterdirection of the fracture line. Such manipulation is technically easy to perform.

Unique ideas of fracture repositioning
Unique ideas regarding manipulation for fracture repositioning have developed in the field of osteopathy in traditional Mongolian medicine in China. Fractures disrupt the balance of the human body, namely (a) the "integration of body and mind", (b) balance between man and nature, and (c) the "integration of universe and man". Therefore, fracture repositioning restructures the life states of "integration of body and mind" and "integration of universe and man".

According to modern life science, "integration of body and mind" is a sealed system of life that cannot be influenced, and "integration of universe and man" is an open system of life that can be influenced but in which antagonization is inappropriate. Fracture repositioning with osteopathy in traditional Mongolian medicine in China uses wine-spraying massage to stimulate the stress instinct of muscles, tendons, skin, and other soft tissues around the fracture ends (physio-psychological induction) to promote self-repositioning of the fracture and adopts manipulation to promote natural repositioning of the fracture.

Therefore, fracture treatment with osteopathy in traditional Mongolian medicine in China utilizes the idea of manipulation by natural, sealed, self and dynamic repositioning of fractures based on the "integration of universe and man".

Unique properties of fracture repositioning
Osteopathy in traditional Mongolian medicine in China holds that fractures destroy the continuity of the body structure and completeness of the body function. Therefore, fracture repositioning should conform to restoration of the continuity of the body structure and completeness of the body function.

In line with modern biomechanics, structural continuity is defined as unification of active and reactive forces, and functional completeness is defined as a balance between the still and dynamic states (dynamic stability, stress stability, and functional stability). Osteopathy in traditional Mongolian medicine in China can achieve fracture repositioning without trauma or sequelae under the state of balance between "stillness" at the proximal fracture end and "movement" at the distal fracture end and by unification of the "active force" at the distal fracture end and "reactive force" at the proximal fracture end.

Based on the idea of natural, sealed, self and dynamic repositioning, fracture treatment with osteopathy in traditional Mongolian medicine in China implies the achievement of structural continuity of the fracture and functional completeness of the repositioned bone.

Unique standards of fracture repositioning
Unique standards of fracture repositioning have been established for long-term practice of osteopathy in traditional Mongolian medicine in China. These standards are based on the idea of natural, sealed, self and dynamic repositioning.
dynamic repositioning and the properties of structural continuity of the fracture and functional completeness of the repositioned bone.

**Standard of fracture repositioning: "force to force"**
According to modern physics, all objects in nature are present within a force field of unification of active and reactive forces; i.e., "force to force". In this sense, the human body can be regarded as a system of unification of active and reactive forces between the body and nature. Usually, an active force is an actively exerted force and a reactive force is a passively exerted force. Active forces are related to reactive forces. The unification of active and reactive forces is a mechanical state for all objects in nature and is a natural law that should be observed.

Based on this natural law, fractures can be regarded as a phenomenon in which structural continuity has been destroyed because of an imbalance of the "force to force" mechanism caused by an improper force exerted at a specific site of the human body. Fracture repositioning and healing should ensure the restoration and restructuring of the "force to force" mechanism. Under the patient’s stress state, fracture repositioning with osteopathy in traditional Mongolian medicine in China is performed by fixing the proximal fracture end, moving the distal fracture end, and practicing "force to force" manipulation along the counterdirection of the fracture. This technique of fracture repositioning conforms to the mechanism of the unification of active and reactive forces between the body and nature. Therefore, fracture repositioning with osteopathy in traditional Mongolian medicine in China observes the standard of "force to force."

**Standard of fracture repositioning: "integration of movement and stillness"**
According to modern physics, all objects in nature are in balance between movement and stillness; namely, integration of movement and stillness. In this sense, the human body and nature can be regarded as being in balance between movement and stillness. Movement refers to a moving state of body and mind, called Qi in Traditional Chinese Medicine and physiology and psychology in Western Medicine. Body refers to external movement, and mind refers to internal movement. Stillness refers to a still state of both body and mind. Body refers to external stillness, and mind refers to internal stillness. Movement is related to stillness. Stillness is the basis, movement is the goal, and movement is integrated with stillness. This integration is a moving state of all objects in nature and is a natural law that should be observed.

Based on this natural law, fractures can be regarded as a phenomenon in which functional completeness has been destroyed because of an imbalance in the "integration of movement and stillness" caused by an improper force exerted at a specific site of the human body.

Fracture repositioning and healing should biomechanically restore and restructure "integration of movement and stillness". Under the patient’s stress state, fracture repositioning with osteopathy in traditional Mongolian medicine in China is performed with the proximal fracture end as the active force and the distal fracture end as the reactive force; "integration of movement and stillness" is practiced by manipulating along the counterdirection of the fracture. This method of fracture repositioning conforms to the mechanism of the unification of movement and stillness between the body and nature. Therefore, fracture repositioning with osteopathy in traditional Mongolian medicine in China observes the standard of "integration of movement and stillness".

**CONCLUSION**
Fracture treatment with osteopathy in traditional Mongolian medicine in China utilizes the idea of natural, sealed, self and dynamic repositioning and the properties of structural fracture continuity and functional completeness of the repositioning. These factors have resulted in its widespread use and represent the future direction of its development.

Fracture repositioning with osteopathy in traditional Mongolian medicine in China follows the standards of "integration of movement and stillness" and "force to force". These standards have contributed to its widespread use and represent the future direction of fracture manipulation without trauma or sequelae.

**REFERENCES**


