

Research Article

Rehabilitation and Care Program for Pain during COVID-19 Recovery

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Abstract:

For the COVID-19 outbreak, there are no specific drugs to treat or prevent patient deterioration and severe complications^[1]. When the outbreak occurred, TCM methods gained valuable experience in the prevention and treatment of COVID-19^[2]. In the prevention and treatment of COVID-19, the results of several clinical trials show that TCM plays an important role in the prevention, treatment and rehabilitation of COVID-19^[3]. Many convalescent patients suffer with pain symptoms due to factors such as disease and complications. Psychotherapy, sports rehabilitation, TCM external application, fumigation, rubbing, acupuncture and moxibustion treatment have formed a unique rehabilitation and nursing plan for COVID-19 convalescent pain, which plays an important role in alleviating the convalescent pain of COVID-19 patients.

I. Clinical characteristics of the COVID-19 recovery period

Middle-aged and elderly patients with chronic basic diseases are prone to novel coronavirus, and the condition is easy to deteriorate. Patients in recovery period often have the following clinical characteristics^[6]:

- (1) Patients can have shortness of breath, fatigue, nausea, ruffian, weak stool, loose stool;
- (2) Thirst, palpitations, sweat more, low heat or not heat, dry cough and less phlegm;
- (3) Long urine, the frequency of nocturia, pale white tongue;
- (4) Silky voice, waist and knee sour and soft, thin body, dry mouth and dry throat, bone steaming tide, night sweat;
- (5) Cough, sputum color white, cold shape and cold limbs, waist and knee acid and soft, loose stool, many times, adverse urine, limb swelling, frequent nocturia.

Recovery patients are also often accompanied by systemic pain, and at the same time for serious, critically ill patients with the use of glucocorticoids and other drugs, easy to cause musculoskeletal pain. Clinical manifestations is unclear tenderness, pain is often more pronounced at night or early morning and not related to limb activity.

II. Rehabilitation and care plan for pain During COVID-19 recovery

1. Psychotherapy:

Psychotherapy is a class of psychotherapy based on psychotherapy theory that influences the patient's psychoemotional interests and psychological activity by scenarios arranged with verbal or non-verbal factors, promoting and improving the patient's social functional

activities in order to achieve pain treatment and rehabilitation^[7]. Psychological therapy can be mainly divided into enlightenment, attention diversion, hint induction, sleep regulation and other methods. Psychotherapy is widely used in clinical practice because of its simple treatment process and rapid curative effect. In the special period of COVID-19 outbreak, patients in recovery have improved after treatment, but the body resistance is low, fragile, coupled with traumatic stress, prone to physical pain discomfort, psychotherapy can timely relieve mood, and then regulate sleep, enhance immunity, relieve pain.

2. Athletic Rehabilitation

Patients in the recovery period, the most important visible systemic fatigue, short of breath and body fatigue, which is caused by long-term bedridden and damage caused by the disease. Long-term staying in bed, motor function decline, muscle activity reduction, results in systemic pain and discomfort. It is recommended for convalescent patients to use TCM rehabilitation exercise, such as Taijiquan, Wuqinxi and Baduanjin, reasonable exercise can be benefit physical rehabilitation, which ensure the normal performance of lung function, strengthen function of muscles, bones and joints, and enhance the resistance ability of the body.

3. External Application Paste Cream

It is applied mainly in clinical aspects, that is traditional Chinese medicine external paste cream, such as Xiaotong Tiegao^[8] and Qufeng Gutong Gel cream^[9]. Local application is directly applied to the patient's pain site or specific acupoints, the drug force can directly reach the lesion, effectively improve the local blood circulation, play the role of anti-inflammatory and pain relief, and lasting efficacy. By the

external application to the skin, without the liver first pass effect, you can avoid the toxic and side effects brought by drugs, and will not bring damage to the body of patients in the recovery period.

4. Fumigation and Scouring Bath with Chinese Medicine

Chinese medicine fumigation therapy has a long history, which was first seen in the "52 kinds of Disease prescription", which recorded fumigation and scouring bath. The fumigation and washing bath with traditional Chinese medicine embodies the overall concept and treatment based on syndrome differentiation as the guiding ideology of traditional Chinese medicine. The proposed traditional Chinese medicine processing into an aqueous solution, for fumigation, generally before washing bath. Fumigation and Scouring bath can penetrate the skin and go directly to the lesion, and the process of fumigation and scouring bath is also a relaxing process for patients. The pain and discomfort of patients in the recovery period, can play a role to unchoke the meridians, exorcise evil out through fumigation and scouring bath of traditional Chinese medicine, which make the zang-fu organs to balance between Yin and Yang, and accelerate the recovery of the body.

5. The Inunction with Traditional Chinese Medicine

The inunction with traditional Chinese medicine is an extension of the external application of traditional Chinese medicine. It is to apply drugs to the patient's pain parts and specific acupuncture points, playing the role of promoting blood circulation and removing blood stasis, dredging meridians and activating collaterals, warming meridians and dispersing cold through the skin absorption. Traditional Chinese medicine smear generally uses traditional Chinese medicine ointment and coating agent, the common clinical use of external ointment and coating agent such as white vein ointment^[10], Snow Mountain Jin Luohan pain relief coating agent^[11]. The efficacy is to promote blood circulation and remove blood stasis, dredging meridians and activate collaterals. Clinical effects can inhibit inflammation, reduce swelling, relieve pain, improve tissue damage and recover nerve function. It is simple in clinical use and has lasting medicinal effect. For the recovery period of COVID-19, the use of traditional Chinese medicine inunction can reduce the medical workload, and the effect of treatment pain is obvious.

6. Acupuncture Therapy

Acupuncture is a traditional therapy in traditional Chinese medicine, including acupuncture, moxibustion, and warm acupuncture. Warm acupuncture combines acupuncture therapy and moxibustion therapy^[12], Moxibustion temperature can not only warm the surface of the skin, but also direct to the lesion through the needle body, and at the same time to relieve the swelling and discomfort of acupuncture, so that patients from tension and discomfort to comfortable, warm feeling. Warm acupuncture can significantly reduce the content of inflammatory factors in the body serum, increase the significant expression of anti-inflammatory factors, reduce

inflammatory stimulation, acupuncture can also promote the change of blood rheology, improve blood circulation, promote local inflammation absorption, and then repair the damaged tissue, so that the pain can be eliminated. Guidelines on COVID-19 Acupuncture Intervention (Second Edition)^[13]. The main point of acupuncture is recommended as Neiguan, Zusanli, Zhongwan, Tianshu and Qi sea, so as to remove residual poison, restore vitality, promote organ repair, and restore lung and spleen function.

In the treatment program of COVID-19, TCM has its obvious advantages. It is easy to recover for mild patients, and less moderate patients convert to severe disease, which can improve the survival rate of severe patients. For the pain symptoms of patients, recovery period should take integrated traditional Chinese and western medicine treatment, give equal attention to rehabilitation and nursing plan, can timely relieve pain symptoms, but also can enhance patients' body immunity, is conducive to patient pain remission in recovery.

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