

# Investigation of Therapeutic Effect of Traditional Mongolian Osteopathy Manual Reduction with Medicinal Wine Spraying Massage and Small Splint External Fixation Therapy for Treatment of Neerll-type Distal Humerus Fracture

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**Abstract: Objectives:** To investigate the effect of traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy for treatment of Neerll-type distal humerus fractures. **Methods:** Sample selection was carried out during time period from November 2014 to May 2019. Sixty-six patients admitted to our hospital were selected as sample patients. The control group was given plaster treatment, while the observation group was given traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy. Efficacy for the two groups of patients was observed. **Results:** In this study, the total effective rate of observation group patients with treatment of traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy was 100%. Meanwhile, total effective rate of patients in control group was 87.88%. The difference was significant,  $P < 0.05$ . **Conclusions:** In this study of clinical treatment, traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy could provide better therapeutic effect for treatment of patients with Neerll-type distal humerus fracture. At the same time, it reduces economic burden of patients. It has higher promotion value for clinical practice.

**Keywords:** *Traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage*

*therapy, Humerus fracture, Treatment effect*

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## 1 Introduction

With the rapid development of modern transportation and construction industry, incidences of a variety of accidents are increasing. This gives rise to increasing number of fracture patients. For patients with Neerll-type distal humerus fracture, neurovascular injury often occurs which poses a serious impact on patient's joint function and daily life. With the advancement of Mongolian medicine research in modern medicine, Mongolian medicine has played better roles in treatment of various diseases<sup>[1]</sup>. Application of traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy in treatment of patients with Neerll-type distal humerus fracture can provide better therapeutic effect. Therefore, this study was conducted to investigate the effect of traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy for treatment of 66 selected patients with Neerll-type distal humerus fracture.

## 2 Materials and methods

### 2.1 General information

Sample selection was carried out from November

2014 to May 2019. A total of 66 patients admitted to our hospital were selected as sample patients. The patients were divided into two groups using computer software. In term of gender composition of the selected sample patients, there were 41 male patients and 25 female patients. In term of age composition, the oldest patient was 6 years old, the youngest patient was 2 years old, average age was (4.2±0.7) years old. Statistical analysis of general data of two groups of patients indicated that balance level between the two groups of patients was relatively high. There was no significant difference shown,  $P>0.05$ , the two groups could be compared.

## 2.2 Methods

Plaster treatment plan was applied for control group. In observation group, traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy was applied. Patient was requested to take supine position, bandage was used to pull the affected shoulder upwards, while another person resisted the traction of patient's elbow joint. It was necessary to engage a certain angle while pulling to ensure no separation and dislocation.

**Table 1.** Comparison of treatment efficacy between two groups of patients

Group	Case	Significantly effective	Effective	Ineffective	Total effective rate
Observation	33	30	3	0	100%
Control	33	24	5	4	87.88%
$\chi^2$					6.231
P					<0.05

## 4 Discussions

For patients with Neerll-type distal humerus fracture, neurovascular injury often occurs which poses serious impact on patient's joint function and daily life. With the advancement of Mongolian medicine research in modern medicine, Mongolian medicine has played better roles in treatment of various diseases. Application of traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy in treatment process of Neerll-type distal humerus fracture patients can provide better therapeutic effect<sup>[4]</sup>. In this study, total effective rate of observation group patients who were given treatment of traditional Mongolian osteopathy with medicinal wine spraying massage and small splint external fixation therapy was 100%. Meanwhile, total effective rate of patients in control group was 87.88%. The difference was significant,  $P<0.05$ .

In summary, traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy could provide

After reduction was successfully performed, external fixation using small splints was adopted for fixation<sup>[2]</sup>. After fracture reduction and fixation, massage with medicinal wine spraying was given to patient three times a day. Patient's Hegu, Zhigou, Waiguan, Siyi and Sanyangluo were massaged using single-handed knead and press method<sup>[3]</sup>.

## 2.3 Statistical method

Statistical methods were required for analysis process of relevant experimental data obtained in this study. Statistical software SPSS19.0 tool was used. Percentage (%) was used to express rate; t test and  $\chi^2$  test were applied. Standard was set as  $P<0.05$  for computation of statistical significance.

## 3 Results

In this study, total effective rate for observation group patients who were applied with traditional Mongolian osteopathy manual reduction with medicinal wine spraying massage and small splint external fixation therapy had reached 100%. In the control group, the total effective rate was 87.88%. The difference was significant;  $P<0.05$ .

better therapeutic effect for treatment of patients with Neerll-type distal humerus fracture in this study. At the same time, it reduces economic burden of patients. It has higher promotion value for clinical practice.

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