

# *Study on the value of comprehensive perioperative nursing management for patients undergoing surgery for acromioclavicular joint dislocation*

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**Abstract:** The clinical value of comprehensive perioperative nursing management in the care of patients with acromioclavicular joint dislocation was analyzed. 62 patients with acromioclavicular joint dislocation who underwent surgery in our hospital from January 2020 to December 2022 were selected and randomly divided into two groups of 31 patients. The nursing methods included routine nursing management (control group) and comprehensive perioperative nursing management (observation group), and the clinical efficacy, pain, joint function, and nursing satisfaction after nursing were evaluated. The excellent treatment rate of the observation group (96.77%) was higher than the control group (80.65%), the difference ( $P < 0.05$ ). The VAS and VRS scores in the observation group were lower than those in the control group, the difference ( $P < 0.05$ ). ASES and Constant-Murley scores in the observation group were higher than those in the control group, the difference ( $P < 0.05$ ). The nursing satisfaction of the observation group (100.00%) showed a higher difference compared to the control group (87.10%), the difference ( $P < 0.05$ ). Perioperative comprehensive nursing management has a remarkable effect on acromioclavicular joint dislocation surgery, which can ensure the surgical effect, reduce postoperative pain and promote the recovery of joint function, which is worthy of promotion.

## **1. Introduction**

Acromioclavicular joint dislocation is a ligament injury caused by violence. In daily life, dislocation will seriously damage the health of patients, which is needed to receive surgical treatment as soon as possible. And the choice of effective care is of great significance for physical rehabilitation<sup>[1]</sup>. This time, 62 patients with acromioclavicular joint dislocation surgery were taken as cases to evaluate the advantages of perioperative comprehensive nursing management in the perioperative period, and the statistics are as follows.

## 2. Data and Methods

### 2.1 Clinical data

62 patients who underwent surgery for acromioclavicular joint dislocation in our hospital from January 2020 to December 2022 were selected as cases, and 31 patients were randomly divided into two groups. Patients in the observation group was 21 to 63 years, with the average age of  $(42.75 \pm 5.26)$  years, and there are 19 males(61.29%) and 12 women (38.71%), including 6 cases of type III (19.35%), 10 cases of type IV (32.26%), and 15 cases of type V (48.39%). The age of the control group was 20 to 65 years, with the average age of  $(42.86 \pm 5.8)$ , including 20 males (64.52%) and 11 females (35.48%), and 8 cases of type III (25.81%), 9 cases of type IV (29.03%) and 14 cases of type V (45.16%). The data were confirmed in the SPSS ( $P > 0.05$ ).

### 2.2 Inclusion criteria

Inclusion criteria: all sufferers met the relevant indications for acromioclavicular joint dislocation; they both had informed and signed consent; all voluntarily undergo surgical treatment.

Exclusion criteria: excluding the possibility of merging with other bone and joint diseases; excluding cognitive impairment; excluding contraindications for surgical treatment; excluding transfers halfway through the hospital.

### 2.3 Methods

The control group was subjected to routine care management. During the acromioclavicular dislocation surgery, the nursing staff pays attention to the changes of the patient's signs, does preoperative examination and preparation, and in the postoperative recovery process, provides basic help in life, and implements rehabilitation guidance.

The observation group received perioperative integrated nursing management. ① Pre-operative care. Before carrying out surgery for acromioclavicular joint dislocation, nursing staff should provide psychological counseling to patients, alleviate their fear and anxiety towards surgical treatment, and explain the treatment principles and precautions for acromioclavicular joint dislocation surgery to improve patient cooperation. They should also introduce successful treatment cases for acromioclavicular joint dislocation surgery, so that patients have sufficient confidence in their physical recovery and actively cooperate with the progress of the surgery. ② Intraoperative care. The temperature and humidity of the operating room should be controlled in the visual field in advance, and the patient should be kept in a comfortable position before the operation of the acromioclavicular joint dislocation. During the operation, the vital signs of the patient should be closely monitored, the sterile operation should be maintained, and the hypothermia should be prevented by thermal measures. If there are any abnormal situations, they need to be dealt with as soon as possible. ③ Postoperative care. After the operation, the patient was replaced in the supine position, and helped to relieve the pain caused by pulling, and the patient was reasonably massaged to promote blood circulation. Pay attention to the skin around the incision, change the dressing regularly, and need to be treated in time. Nursing staff guide the patients through the attention shift method and the whole body relaxation method to relieve the physical discomfort, and let the patients through listening to music, watching TV and other ways to reduce the physical and mental burden. At the same time, patients need to be designed with a healthy diet plan, maintain light and easily digestible foods, and consume high calorie, high-quality protein, and calcium foods reasonably. Finally, after the patient's signs are stable, the patient is guided to carry out early rehabilitation training, and implement the muscle contraction of the affected limb and distal joints,

so as to promote the recovery of the patient's joint function.

## 2.4 Observation indicators

Clinical efficacy needs to be compared with excellent (pain, swelling and tenderness symptoms basically disappeared, postoperative joint function recovery is good), good (pain, swelling and pain symptoms improved significantly, postoperative joint function improved), and poor (pain, swelling and tenderness symptoms still exist, postoperative joint function was not improved).

The VAS and VRS scores were used to compare the pain conditions.

Comparison of joint function with ASES and Constant-Murley scores.

The comparison of nursing satisfaction was conducted on three levels: very satisfaction, general satisfaction and dissatisfaction.

## 2.5 Statistical calculation

With the help of SPSS22.0, the data forms are ( $\bar{x} \pm s$ ) and (%) respectively. The inspection methods are  $t$  and  $\chi^2$  respectively, with EXCEL2013 integration results, the final  $P < 0.05$  demonstrated a large difference.

## 3. Results

### 3.1 Clinical efficacy

The excellent treatment rate in the observation group (96.77%) was higher than the control group (80.65%), with the difference ( $P < 0.05$ ), shown in Table 1.

Table 1: Clinical Efficacy (n, %)

group	Example number	Excellent	good	poor	Excellent rate [Example (%)]
observation group	31	18	12	1	30(96.77)
control group	31	13	12	6	25(80.65)
$\chi^2$					4.026
$P$					0.045

### 3.2 Pain condition

The VAS and VRS scores in the observation group were lower than those in the control group, ( $P < 0.05$ ), as shown in Table 2.

Table 2: Pain condition ( $\bar{x} \pm s$ )

group	Example number	VAS(score)		VRS(score)	
		Before the intervention	After the intervention	Before the intervention	After the intervention
observation group	31	7.43±0.58	1.04±0.35	7.56±0.65	1.13±0.38
control group	31	7.39±0.67	2.26±0.42	7.50±0.72	2.40±0.47
$t$		0.251	12.425	0.344	11.699
$P$		0.802	0.000	0.732	0.000

### 3.3 Joint function

The ASES and Constant-Murley scores in the observation group were higher than those in the control group, ( $P < 0.05$ ), as shown in Table 3.

Table 3: Joint function ( $\bar{x} \pm s$ )

group	Example number	ASES (score)		Constant-Murley (score)	
		Before the intervention	After the intervention	Before the intervention	After the intervention
observation group	31	63.40±9.89	89.12±7.16	58.47±9.62	86.20±68.4
control group	31	63.48±9.94	74.58±7.28	58.53±9.70	69.47±6.54
<i>t</i>		0.032	7.928	0.025	10.118
<i>P</i>		0.975	0.000	0.981	0.000

### 3.4 Satisfaction with nursing care

The nursing satisfaction of the observation group (100.00%) is higher than that of the control group (87.10%), ( $P < 0.05$ ), as shown in Table 4.

Table 4: Nursing Satisfaction (n, %)

group	Example number	Very satisfied	General satisfaction	dissatisfaction	Satisfaction rate [Example (%)]
observation group	31	17	14	0	31(100.00)
control group	31	14	13	4	27(87.10)
$\chi^2$					4.276
<i>P</i>					0.039

## 4. Discussion

Acromioclavicular joint dislocation is a very common shoulder joint disease in clinical practice, which refers to the situation where the joint between the distal clavicle and the scapula is directly or indirectly affected by violence, resulting in dislocation and displacement<sup>[2]</sup>. The acromioclavicular joint is located between the sternocleidomastoid muscle and the scapulohyoid muscle, which plays a role in connecting, supporting, preventing and limiting the movement of the shoulder joint. Once affected by violence, it is easy to tear the ligament and joint capsule of the acromioclavicular joint and cause dislocation of the acromioclavicular joint<sup>[3]</sup>. After the occurrence of acromioclavicular joint dislocation, its symptoms mainly include local pain, swelling, and tenderness, accompanied by symptoms such as limited shoulder joint activity, which seriously damages the patient's physical health and quality of life<sup>[4]</sup>. Surgery is the most common means to treat the dislocation of acromioclavicular joint, which can help restore the normal acroxoclavicular joint function. In order to improve the effect of operation, it also needs to cooperate with scientific nursing management<sup>[5]</sup>. Perioperative comprehensive nursing management needs to be based on the characteristics of acromioclavicular joint dislocation surgery, strengthen psychological counseling and health education before surgery, strictly follow standardized procedures during surgery, and provide support in pain, rehabilitation, and other aspects after surgery to improve the prognosis of patients<sup>[6]</sup>.

After the analysis of data parameters, it was found that the rate of treatment in the observation group increased more significantly, the VAS and VRS scores were further reduced, and the ASES and Constant-Murley scores increased more significantly after intervention, which finally improved

the overall nursing satisfaction, with the difference compared with the control group ( $P < 0.05$ ). The analysis confirmed that the 62 patients with dislocation surgery achieved better outcomes after perioperative integrated care management.

In conclusion, the perioperative comprehensive nursing management has a remarkable effect on the acromioclavicular joint dislocation surgery, which can ensure the surgical effect, reduce postoperative pain, promote the recovery of joint function, and has the value of clinical promotion.

## References

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