

Research on sports injury of table tennis undergraduates in Liaoning Province

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Abstract:

This study uses the literature, questionnaire, and expert interview to investigate the sports injury of table tennis majors in Liaoning Province. The purpose of this study is to enrich the group research in sports injury and to prevent and reduce the military ball in Liaoning Province. The purpose of this study is to provide reference for the sports injury of special undergraduates, so as to better serve the teaching of table tennis. The results show that the time of sports injury is mainly in practice, including waist, knee joint, finger and wrist. The occurrence of sports injury is chronic, and the proportion of acute injury is high. The degree of sports injury was mainly mild. The most common sports injuries occurred in a pulled muscle. The most frequent injuries occurred in the lower extremity, and most of them were knee joint injuries. Waist is the most important part of the trunk. The upper limb is only the fingers and wrists. Suggestions: we should pay attention to basic physical training at ordinary times. During special exercises, we should make the exercise plan reasonably and scientifically according to their physical fitness and physical level and make reasonable and sufficient preparation activities and relaxation activities after the exercises.

Keywords: Liaoning Province; Colleges and universities; Table tennis special; undergraduate; Sports injury

Introduction

The sports injury of any sports event is the great enemy of the participants. The sports injury of table tennis is no exception. The professional knowledge of table tennis undergraduates is not only the capital of future teachers but also the foundation of serving physical education. In addition, in terms of social demand, it is to better meet people's growing needs for table tennis fitness and entertainment [1]. Therefore, understanding the situation of sports injury in the group of table tennis undergraduates is not only conducive to the full play of their high-quality table tennis skills but also will effectively prevent the occurrence of sports injury, so as to play a preventive role. At present, the research on table tennis injury is relatively less.

1. Research objects and methods

1.1 Research object: This paper takes the sports injury of table tennis undergraduates in Liaoning Province as the research

Among them, the research on sports injury of table tennis undergraduates needs to be further enriched and improved. This paper investigates and analyzes the sports injuries of table tennis undergraduates in Colleges and universities of Liaoning Province, aiming to improve the overall level of the talent training system of undergraduate level in Liaoning Province; To promote the physical and mental recovery of soldiers ballplayers in Liaoning Province after injury. It will play a positive role in guiding the scientific and healthy concept of table tennis fitness in the future. It will also provide a reference for the improvement of medical security and facilities of military sports in Liaoning Province.

object.

1.2 Research methods

1.2.1 Literature review method: Through a large number of consulting work on CNKI, CNKI, Dalian Library, and Liaoning

Normal University Library, this study inquires about scientific research literature at home and abroad, such as sports injury, table tennis, and table tennis undergraduates, so as to understand the current research and progress in this field at home and abroad.

1.2.2 Expert interview method: According to the needs of this study, the interview outline is made to interview table tennis teachers in some universities.

1.2.3 Questionnaire survey

In order to understand the sports injury situation of the college students of table tennis in Liaoning Province, this study based on the needs, through the knowledge of the previous related research, preliminarily designed the questionnaire "Table Tennis College Students Sports Injury Investigation" questionnaire and under the guidance of experts to modify for many times, and finally completed the questionnaire "Liaoning Province College Table Tennis Students Sports Injury Questionnaire"

2. Research results and analysis

2.1 Analysis of Sports Injury Characteristics of Table Tennis Undergraduates in Liaoning Province

2.1.1 Time analysis of sports injury

(1). Basic information about the time of sports injury

Table 2.1 statistical table of times of sports injury occurrence time

	Before practice	In practice	After practice	Total
Frequency	0	260	14	274
Sort	3	1	2	

According to **Table 2.1** and **Figure 2.1**, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated in this study, the occurrence times of sports injuries were 274 times in total. The occurrence time of sports injury only involves "in practice" and "after practice". The

"pre-practice" period has not yet been covered. Among them, the occurrence time of sports injury in "practice" accounted for the largest proportion, accounting for nearly 95 percent, statistical times of 260, accounting for 94.89 percent.

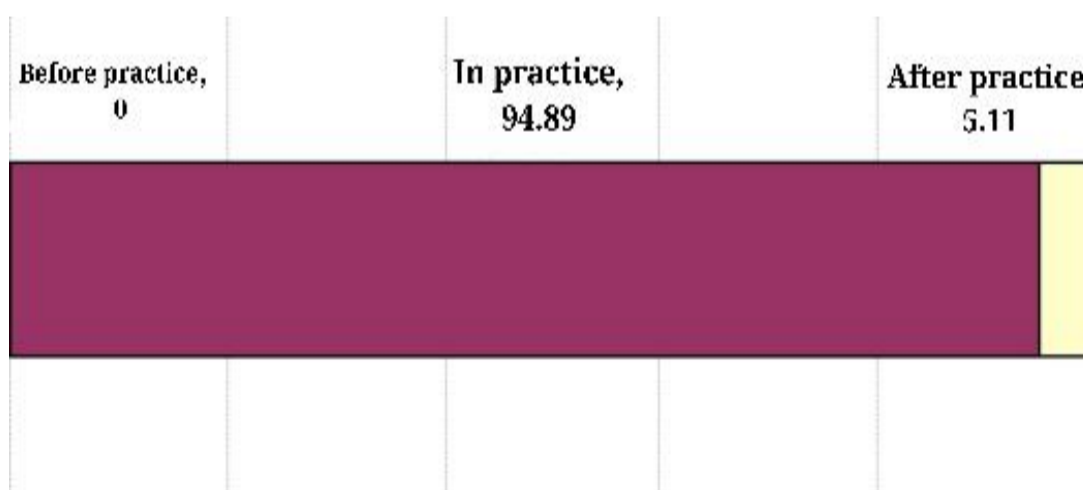


Figure 2.1 percentage of time distribution of the time of sports injury

The proportion of "after practice" was only about 5 percent, and the number of statistics was only 14 times, which accounted for only 5.11 percent. On the whole, the occurrence time of sports injury is mainly in the undergraduate group of table tennis specialized in colleges and universities in Liaoning Province

investigated by this research Focus on the practice. This is because in the process of learning and practicing table tennis skills and tactics, may be due to their own physical skills, skills and tactics are not firm. And equipment or emergency and other factors may lead to the occurrence of sports injuries.

(2). Distribution of injury sites at the time of occurrence of sports injury

Table 2.2 sports injury time injury statistics

Time	Ordinal	Place	Ordination	Frequency	Percentage
In practice	1	Neck	8	14	5.11
	2	Wrist	4	30	10.95
	3	Finger	2	52	18.98
	4	Shoulder	5	15	5.47
	5	Waist	1	67	24.45
	6	Hips	5	15	5.47
	7	Thigh front muscle group	5	15	5.47
	8	Knee	3	45	16.42
	9	Ankle	9	07	2.55
After practice	1	Waist	9	07	2.55
	2	Knee	9	07	2.55

As can be seen from Table 2.2, among the college table tennis undergraduates in Liaoning Province investigated in this study, sports injuries occur in a large number of places, including nine places, which are widely distributed. Among them, the number of sports injuries in the waist were the largest, accounting for nearly a quarter, and the statistical number was 67 times, accounting for 24.45 %. Next is the finger part of the sports injury, accounting for nearly one-fifth of the statistical number of 52 times, the proportion of 18.98 %. Sports injuries of knee joint ranked third, accounting for a slightly lower proportion than sports injuries of finger parts, with 45 statistical times,

accounting for 16.42 %. Other sports injuries were wrist, shoulder, hip, thigh anterior muscle group, neck, ankle in order. The statistical times were 30 times, 15 times, 15 times, 15 times, 14 times, 7 times, and the corresponding proportion was 10.95 %, 5.47 %, 5.47 %, 5.47 %, 5.11 %, 2.55 %, respectively. Practice after the occurrence of sports injury parts is less, the main distribution of the waist and knee, statistical number also only 7 times, accounted for 2.55 %, overall, in this research survey in the college table tennis specialized undergraduate group in Liaoning province, the time to practice sports injury of the waist and knee, her fingers and wrist.

2.1.2 Analysis of the nature of sports injury

(1). Basic information about the nature of sports injuries

Table 2.3: frequency statistics of the nature of different sports injuries

Category	Acute	Chronic	Total
Frequency	195	103	298
Sort	1	2	

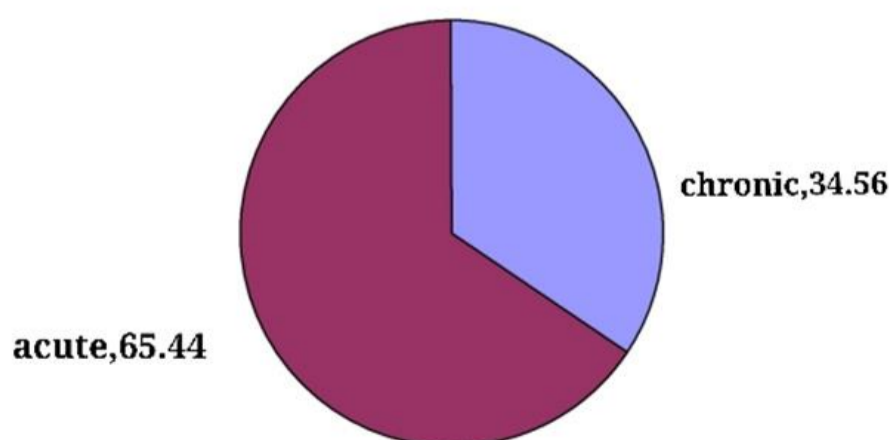


Figure 2.2: the percentage distribution of people with different sports injuries

Injury refers to the damage caused to the body when the body is subjected to various forces from the outside world and the body is unable to withstand the force. The original structure of human skin, muscles, muscles, bones, viscera, and other tissues are destroyed, thus causing local or systemic damage to the body function [2]. Generally, the nature of sports injury includes acute sports injury, chronic sports injury, and the complex sports nature composed of the two [6]. Among them, an acute sports injury is an injury caused by immediate or indirect violence. Generally, the symptoms of injury appear quickly, with obvious features and a short duration of disease. Chronic sports injury refers to the strain caused by local overload and multiple minor injuries, or the old injuries caused by the improper transformation of acute injuries [3]. Generally, a chronic sports injury is divided into old injury and strain injury. Outdated injury is the injury site after sports injury, not timely and effective treatment and repeated recurrence. A work injury is because, in the movement process, the body local place bears the

(2). The distribution of injury sites in sports injury

As can be seen from **Table 2.4**, among the college ping-pong undergraduates in Liaoning Province investigated in this study, different sports injuries resulted in different parts of the injuries. First of all, sports injury nature as "chronic" occurred in the most parts, there are seven statistical parts, but the occurrence probability of each place is low. The highest injury probability of knee joint was only 22 times The proportion is only 7.38 %.

Table 2.4: statistics of the nature of injury

Quality	Ordinal	Place	Sort	Frequency	Percentage
Acute	1	Wrist	4	30	10.07
	2	Finger	1	45	15.10
	3	Shoulder	6	15	5.03
	4	Waist	1	45	15.10
	5	Hips	6	15	5.03
	6	Knee	1	45	15.10
Chronic	1	Neck	6	15	5.03
	2	Finger	14	14	4.70
	3	Waist	15	7	2.35
	4	Thigh front muscle group	6	15	5.03
	5	The muscle group behind the thigh	6	15	5.03
	6	Knee	5	22	7.38
	7	Ankle	6	15	5.03

load is larger, and for a long time so, gradually exceeded the limit that this body place bears and produces the injury. Its external symptoms are not obvious, slow and recovery time is long.

According to Table 2.3 and Figure 2.2, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated by this research, there were 298 statistical times of sports injury nature. In "acute", "chronic" have different degrees of involvement. Among them, The "acute" in the nature of sports injuries accounted for the largest proportion, accounting for nearly two-thirds, with 195 statistical times. The proportion was 65.44%. The "chronic" in the nature of sports injuries accounted for more than one-third of the proportion, with 103 statistical times, accounting for 34.56%. Therefore, among the undergraduate students of table tennis in colleges and universities in Liaoning Province investigated by this study, the nature of sports injuries is mainly acute, supplemented by chronic.

Among them, the statistical times of neck, thigh anterior muscle group, thigh posterior muscle group, and ankle were all 15 times, accounting for only 5.03 %, while the statistical times of fingers and waist were 14 times and 7 times, accounting for 4.70 % and 2.35 % respectively. Therefore, "chronic" sports injuries mainly occur in the knee joint and the anterior and posterior thigh muscle groups.

Secondly, although the "acute" site of sports injury is more, and there are six statistical sites, the occurrence probability of each place is relatively high. Among them, the proportion of fingers, waist, and knee joint was the same and the highest, and the statistical times were all 44 times, accounting for 15.10 %. The proportion of wrist was followed by 30 statistical times, accounting for 10.07 %. While shoulder and hip accounted for the same proportion, and the proportion was small, with only 15 statistical times, accounting for 5.03 %.

Therefore, "acute" sports injuries mainly occur in the fingers, waist, knee joints. On the whole, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated in this study, the occurrence of sports injuries is mainly in the chronic location, and there are many forms of sports injuries in the acute location. In the proportion of the nature of sports injury, the proportion of the site of acute sports injury is the highest, the proportion of the site of chronic sports injury is the second highest.

2.1.3 Analysis of sports injury degree

(1). Basic information of the degree of sports injury

Table 2.5: statistical table of times of different sports injuries

Extent	Mild	Medium	Severe	Total
Frequency	208	126	7	341
Sort	1	2	3	

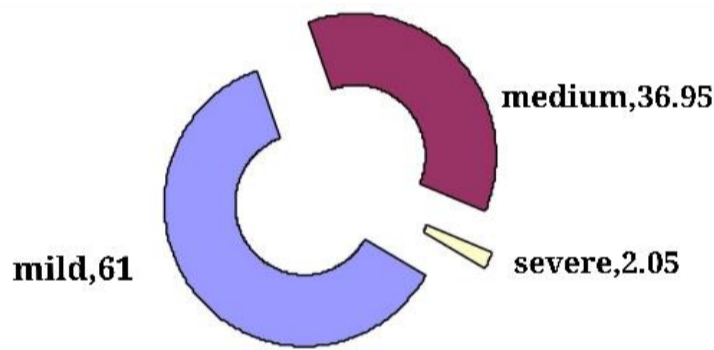


Figure 2.3: the percentage distribution of people with different degrees of sports injury

According to Table 2.5 and Figure 2.3, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated by this research, the number of sports injuries was 341 times. "Mild" (normal practice), "moderate" (adjusted practice), "severe" (suspension) are involved in varying degrees. Among them, the degree of sports injury as "mild" accounted for the largest proportion, Accounted for far more than half of the total, with 208 statistical times, accounting for 61.00%. The proportion of "moderate" in the degree of sports injury is the second largest, accounting for more than one-third, with 126

statistical times, accounting for 36.95 %. At the end of the list was "severe" in the nature of sports injuries, which accounted for the smallest proportion, with only 7 statistics, accounting for only 2.05 %. On the whole, among the undergraduates of table tennis in colleges and universities in Liaoning Province investigated by this research, the degree of sports injury is in a compound form, which is mainly mild, supplemented by moderate.5. Distribution of sports injury degree in the injury site.

Table 2.6: sports injury in the injury site statistics

Extent	Ordinal	Place	Sort	Frequency	Percentage
Mild	1	Wrist	4	30	8.80
	2	Finger	1	59	17.30
	3	Shoulder	8	15	4.40
	4	Waist	2	52	15.25
	5	Hips	8	15	4.40
	6	Knee	3	37	10.85

Medium	1	Neck	6	29	8.50
	2	Waist	8	15	4.40
	3	Thigh front muscle group	8	15	4.40
	4	The muscle group behind the thigh	8	15	4.40
	5	Knee	4	30	8.80
	6	Ankle	7	22	6.45
Severe	1	Waist	13	7	2.05

It can be seen from Table 2.6 that among the college table tennis undergraduates in Liaoning Province investigated in this study, "mild" and "moderate" table tennis undergraduates had the most occurrence sites, both of which were six, while "severe" table tennis undergraduates had the least occurrence site, only one.

Above all, in the occurrence place that the degree of sports injury is "mild", not only the occurrence place is much, and the occurrence rate is also the whole highest. The highest probability of sports injury occurred in fingers, with 59 statistical times, accounting for 17.30 %.The waist came in second place with 52 statistics,or15.25percent.Sports injuries of knee joints ranked third, with 37 statistical times, accounting for 10.25 %.The other areas of injury, in order, were the wrist, For shoulder and hip, the statistical times were 30, 15, and 15 times respectively, accounting for 8.80 %, 4.40 % and 4.40 % respectively. Therefore, the "mild" sports injuries are mainly concentrated in the fingers, waist, knee joint, and other parts.

2.1.4 Analysis of sports injury types

(1). Basic information of sports injury types

Table 2.7: frequency statistics of different types of sports injuries

Category	Scrape	Contusion	Joint damage	Ligament damage	Pulled muscle	Muscle strain	Total
Frequency	29	67	165	30	156	37	484
Sort	6	3	1	5	2	4	

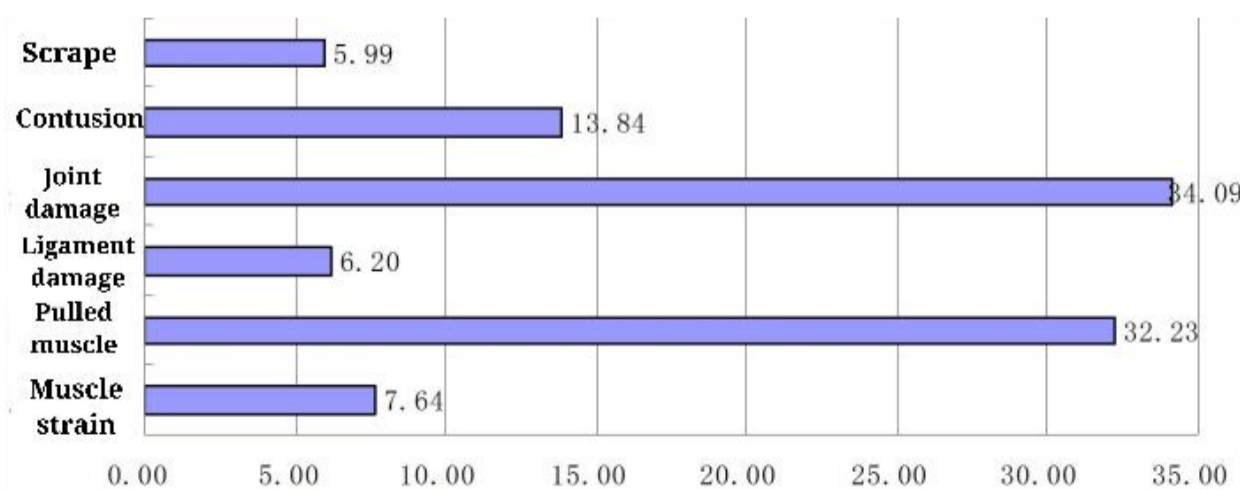


Figure 2.4: percentage distribution of people with different types of sports injuries

Secondly, although there were also six sites where the degree of sports injury was "moderate", both the overall incidence and the incidence of each site were relatively low. Among them, the occurrence probability of sports injury was the knee joint with 30 statistical times, accounting for 8.80 %, and the neck was ranked second with 29 statistical times, accounting for 8.50 %. The other was the ankle, with 22 statistical times, accounting for 6.45 %, and the waist, thigh anterior muscle group, and thigh posterior muscle group, with 15 statistical times, accounting for 4.40 %.

Finally, the occurrence degree of sports injury was "severe" only in the waist, and accounted for the lowest proportion, with only 7 statistical times, accounting for 2.05 %. On the whole, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated by this research, the occurrence degree of sports injury is mainly "mild", and "moderate" is the secondary form.

According to table 2.7 and Figure 2.4, there are six kinds of sports injuries among table tennis undergraduates in Liaoning Province, which are abrasion, contusion, joint injury, ligament injury, pulled muscle and muscle strain. The total number of statistics is 484. Among the six kinds of sports injuries, "joint injury" accounted for the largest proportion, accounting for more than one-third. The number of statistics was 165 times, accounting for 34.09 %. In the second place is pulled muscle, accounting for nearly one-third of the total, 156 times, accounting for 32.23 %. In third place was a contusion, accounting for more than one-eighth of the total, which was 67 times, accounting for 13.84 %. Other types of sports injuries are more than 5 %, followed by muscle strain, ligament injury, abrasions, statistical times are 37 times, 30 times, 29 times, the proportion is 7.64 %, 6.99 %, 6.20 %. On the whole, in the

group of table tennis undergraduates in Liaoning Province, the main types of sports injuries are joint injury and pulled muscle, and a variety of sports injuries coexist with a contusion. The main types of table tennis injuries in college students are joint sprain and muscle strain[7]. Among the sports injuries of table tennis players in China, sprains and strains account for a large proportion of sports injuries[8].

(2). Types of sports injuries and distribution of injury sites

It can be seen from table 2.8 that among the table tennis undergraduates in Liaoning Province investigated by this research institute, "pulled muscle" is the most common type of sports injury, with a total of eight parts. The second is "joint injury", with a total of six“ There are three parts of contusion and muscle rash. There are two ligament injuries. And there's only one scratch.

Table 2.8: statistical table of different injury sites of sports injuries

Category	Ordinal Place	Sort	Number	Percentage	
Scrape	1	Finger	6	29	5.99
Contusion	1	Finger	3	30	6.2
	2	Waist	7	22	4.55
	3	Achilles tendon	8	15	3.1
Joint damage	1	Neck	8	15	3.1
	2	Wrist	3	30	6.2
	3	Finger	3	30	6.2
	4	Shoulder	8	15	3.1
	5	Knee	1	60	12.4
	6	Achilles tendon	8	15	3.1
Ligament damage	1	The muscle group behind the thigh	8	15	3.1
	2	Achilles tendon	8	15	3.1
Pulled muscle	1	Neck	21	14	2.89
	2	Abdomen	8	15	3.1
	3	Waist	1	60	12.4
	4	Hips	8	15	3.1
	5	Thigh front muscle group	8	15	3.1
	6	The muscle group behind the thigh	8	15	3.1
	7	Knee	8	15	3.1
	8	Ankle	22	7	1.45
Muscle strain	1	Waist	8	15	3.1
	2	Thigh front muscle group	8	15	3.1
	3	Knee	22	7	1.45

First of all, in the sports injury type of "pulled muscle", the injury parts are not only many but also the overall incidence is second to high. The waist was the first part of the injury probability, accounting for 12.40 % of the total number of 60. The abdomen, hip, anterior thigh muscle group, posterior thigh muscle group, and knee joint were ranked second, with 15 times of statistics, accounting for 3.10 %. The number of sports injuries of the neck was 14, accounting for 2.89 %. At the end of the list was the ankle, with only 7 counts, accounting for only 1.45 %. Therefore, pulled muscle is the most common type of sports injury, and the waist is the main part of the pulled muscle. Secondly, although there are six parts of "joint injury" in the category of sports injury, the overall incidence is the highest. Among them, the knee joint was the highest, accounting for 12.40 % of the total number of times, and the wrist and finger were the second, accounting for 6.20 % of the total number of times. Other parts of the statistics were 15 times, respectively, the neck, shoulder, Achilles tendon, the incidence rate was 3.10 %. Therefore, muscle strain is the second most common type of sports injury, and the knee joint is the main part of joint injury. Third, although there are three parts of "contusion" and "pulled muscle", the overall incidence of "contusion" is much higher than that of "muscle strain". Among them, "contusion" occurred

2.2 Analysis of Sports Injury Site of Table Tennis Undergraduates in Universities of Liaoning Province

According to Table 2.9, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated in this study, the sports injury the department is the most important. In the distribution of locations, "lower extremity" occurred the most times, accounted for the highest proportion and the most moving parts, with a total of 214 times. The per capita sports injury rate was 124.42%, which indicated that every individual in the subjects investigated in this study had sports injury at lower extremity at least once. The occurrence of "trunk part" was more frequent, accounting for the second-highest proportion and the second most moving part, with a total of 175 times. The per capita sports injury rate was 101.74%, which indicated that the investigation in this study Each individual in the study had a

most frequently in fingers, accounting for 6.20 % of the total, while the other two were waist and Achilles tendon, accounting for 4.55 % and 3.10 % of the total. The highest incidence of "muscle strain" is the waist and thigh muscles, the number of statistics is 15 times, accounting for 3.10 %. The proportion of knee joint is the smallest, and the statistics are the second 7 times, accounting for 1.45 %. Therefore, the main types of sports injuries are contusion of fingers, pulled muscle of waist, and thigh muscles.

Finally, although there is only one "bruise" in the category of sports injuries, its proportion is very close to that of "ligament injuries". There is only one difference in the number of statistics between the two, accounting for only a 0.21 % difference. On the whole, among the table-tennis undergraduates in colleges and universities in Liaoning Province investigated by this research, "pulled muscle" is the most common type of sports injury, accounting for the second highest. The type of "joint injury" was more and the proportion was the highest. At the same time, with other different kinds of sports injuries. Therefore, in the table-tennis undergraduates of colleges and universities in Liaoning Province investigated by this study, the sports injury sites present a situation of multiple types of injuries.

case of a motor injury to the trunk. The frequency of upper limb injury ranked the third, with a total of 151 times, and the average sports injury rate was 87.79%, indicating that nearly nine-tenths of the subjects investigated in this study had suffered from upper limb injury. Although neck injuries came in last, with 37, the incidence of sports injuries per person was more than one in five.

There were five sports injuries in the lower limbs. The sports injury of knee joint accounted for the largest proportion, with 107 statistical times, accounting for 18.54%, and the per capita sports injury rate reached 62.21%. The flexion and extension Angle of the knee joint ranges from 0 to 150 degrees, and when the flexion and extension angle of the knee joint ranges from 30 to 150 degrees [4], the probability of knee joint injury is maximum.

Table 2.9: statistical table of sports injuries

Place	The cumulative number of times	Percentage	Per capita		Ordinal Sort	Frequency	Percentage	Per capita injury rate		
			injury rate	Sort Place						
Head and neck	37	6.41	21.51	4	Neck	1	5	37	6.41	21.51
Upper limbs	151	26.17	87.79	3	Wrist	1	4	48	8.32	27.91
					Finger	2	3	103	17.85	59.88
Torso cadre position	175	30.33	101.74	2	Shoulder	1	9	24	4.16	13.95
					Abdomen	2	12	6	1.04	3.49
					Waist	3	1	121	20.97	70.35
					Hips	4	9	24	4.16	13.95
The lower limbs	214	37.09	124.42	1	Thigh front muscle group	1	6	30	5.20	17.44
					The muscle group behind the thigh	2	6	30	5.20	17.44
					Knee	3	2	107	18.54	62.21
					Ankle	4	8	29	5.03	16.86
					Achilles tendon	5	11	18	3.12	10.47

The characteristics of table tennis determine that participants must be in a "semi-squatting position", and the Angle of the knee joint is mostly within the range of 30 to 150 degrees. As the knee joint is often in a semi-squatting position and requires a variety of pace changes, the knee joint operates in an irregular alternate way. Make the knee repeatedly flexion, extension and twist, and half squat force, resulting in sports injury. The second place is the anterior thigh muscle group and posterior thigh muscle group, with 30 statistical times, accounting for 5.20 % of the proportion, 17.44 % per capita. Due to the special and harsh requirements of table tennis on knee flexion, a part of the thigh quadriceps femoris undertakes a large load, and the quadriceps femoris is in a state of fatigue due to the repeated contraction of the quadriceps femoris for a long time, which will cause certain damage to the thigh anterior muscle group and thigh posterior muscle group in different degrees. The statistical frequency of ankle and Achilles tendon was 29 times and 18 times respectively, accounting for 16.86 % and 10.47 % respectively.

There are four sports injuries in the trunk. The sports injury of the waist accounted for the largest proportion, with 121 statistical times, accounting for 20.97 %, and the per capita

sports injury rate was as high as 70.35 %. When completing a perfect technical and tactical movement, it is the result of the connection and coordination between the various muscle groups of the body. Among them, the powerful waist strength is to complete any technical and tactical guarantee. In the actual study and practice, the importance of the relationship between waist and techniques and tactics is well known, but it is easy to be ignored in the practice.

The shoulder was followed by 24 statistical times, accounting for 4.16 % and 13.95 % per capita. Table tennis players most taboo is the shoulder injury [5]. Because the shoulder hand will directly affect the technical and tactical normal play. And there are a lot of reasons for shoulder injuries. First of all, different playing methods cause different degrees of sports injury to the shoulder. Among them, the incidence of the highest with the circle combined with a fast attack. Moreover, the shoulder joint local load is too large and increases too fast. Third, the daily learning and practice of ignoring the shoulder joint to carry out targeted preparation activities, and almost no relaxation activities after practice. And the hip is the same thing. The incidence of hip sports injury may be related to the incidence of

waist sports injury. Among them, the incidence of the abdomen was the smallest, with only 6 statistical times, accounting for 3.49 % per capita.

There are two sports injuries in the upper limb parts, namely fingers and wrists. Among them, finger sports injury accounted for the largest proportion, the statistical number of 103 times,

3. Conclusions and Suggestions

3.1 Conclusion

3.1.1 The time of sports injury is mainly concentrated in practice, especially in the waist, knee joint, fingers, and wrist. The nature of sports injury is mainly chronic, and the proportion of acute parts is high. The degree of sports injury is mainly mild, supplemented by moderate. The most common type of sports injury is muscle strain.

3.2 Suggestions

3.2.1 Table tennis is very important for all kinds of physical fitness. As the most basic sports ability of the body, physical fitness not only lays the foundation of technical and tactical training, but also provides a prerequisite for bearing heavy load and high-intensity training.

accounting for 17.85 %, and the per capita sports injury rate is 59.88 %. The second was wrist, with 48 statistical times, accounting for 8.32 % and 27.91 % per capita. Finally, the head and neck sports injury site are only one, that is, the neck, the statistical number of 37 times, per capita sports injury rate is 21.51 %.

3.1.2 The "lower limb" was the most frequently injured part, and the knee joint was the most frequently injured part. The waist is the most important part of the trunk. There are only fingers and wrists in the upper limbs.

3.2.2 Practice should be based on their own physique, physical level, reasonable and scientific exercise plan, and the preparation activities before practice and relaxation activities after practice should be reasonable and sufficient.

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