# Analysis and prevention of sports injury in University skating course

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### Abstract

The roller skating is a popular sports in young people, and it has been widely carried out in Colleges and Universities. However, to the beginner, the probability of sports injury is relatively high. Especially in the selective course, the student is the first time to contact roller skating. The analysis has been carried out about the situation of sports injury and the strategy has been proposed to prevent the sports injury.

# Keywords

### Roller skating; sports injury; prevention.

# **1.** Introduction

Roller skating is a sports with fitness, competition, entertainment, fun, skill, leisure and alarmingly dangerous. So, it has become one of the fastest growing sports. Long time engaged in roller skating can effetely improve the function of the human central system, promote the body's metabolism, promote blood circulation, improve the respiratory system, digestive system and other organ functions, and even improve the overall development of human speed, strength, endurance, coordination and flexibility, and other quality. Roller skating course can cultivate students' courage and indomitable will. At the same time, the roller skating is a sports with a high probability of sports injury. This paper analysis the situation of sports injury in roller skating course, and propose some prevention methods.

# 2. The type of injury in roller skating

Firstly, we analyzed some common types of sports injury in roller skating, shown as the Table 1.

Injury types	probability%
Hamstring	19
Strain	4.8
Contusion	6.4
Scratch	36
Draw cut	13.4
Dislocation	1.9
Fracture	8.7

Table 1. The type of injury in roller skating

From the Table, the probability of scratch and draw cut is higher than other sports project. This is decided by the character of sports type. Because the roller skating is a balance movement, it needs the practitioner to has a good physical balance. In addition, the friction between roller skating shoes

and the ground is very low, in order to ensure the people can skate smoothly, which proposed greater challenges to the practitioner's balance. Thirdly, the uneven ground has become one of the factors that cause the sports injury.

# 3. The causes of sports injury

There are various factors can cause sports injury, they can be summarized as three aspects:

### 3.1 Unskillful

skilled movement is the basic of the roller skating sports, it can directly affect the incidence of skating sports injury. In the beginning period, the practitioner can not master the skills, brain cortex inhibition has not been determined, excited inhibition showing diffusion state, conditioned reflex contact instability. These shown on physical performance is incoordination. If the teacher does not give guidance and corrected in time, it could easily lead to sports injuries.

### 3.2 Guidance

In class, when student's movement is irregular, teacher should give guidance and corrected in time. When explain the movement, teacher should control the explain speed, leave the students enough time to memory and imitation.

### 3.3 Practice

When practice, students should pay attention to the movement tips. Blind overstating practice difficult can lead to injury. Students should also pay attention to cultivate the self-protection awareness.

# 4. The prevention of roller skating sports in college and University

### 4.1 Make preparations before class

### 4.1.1 Make science teaching plan

All the sports teaching should obey the progressive rules. Make a science teaching plan can make students learn from easy to hard, from simply to complex. Before class, teacher should arrange the teaching contents according to the principle of transfer and combined with the actual situation. Making the students' movement meets the principle of movement forming, it can improve the teaching effect and efficient, and also can effetely prevent the sports injury.

### 4.1.2 Inspection of ground and equipment

When the skater glide in a fast progress, if there is water, sand or other substances on the ground, it will result in sports injury. So, before practice, the ground should be cleaned and the roller shoes should be checked carefully. Fall is inevitable to the beginner, wearing protective gear is necessary, especially the kneepad. Knee is usually the largest impact part when fall. Wearing protective gear can effectively prevent the sports injury.

### 4.1.3 Do warm-up activities before exercise

Warm-up activities is necessary before sports. If the preparation is not enough, the ligament can not reach the best statement and will be injured in practice. In roller skating course, the teacher should lead students to make abundant preparation and control the exercise intensity, it is benefit to the next teaching contents.

#### **4.2** Strengthen the teaching organization

#### 4.2.1 Raise awareness of sports injury prevention

In teaching progress, some students got injured when they are making simply actions. Due to these actions are easier, the students ignored the risk. In roller skating course, it is necessary to cultivate students the awareness of injury prevention, and make them keep their brain clear all the time.

#### 4.2.2 Reasonable arrangements for exercise stress.

Arrange the teaching contents in a reasonable area, it can avoid excessive exercise and the injury caused by fatigue. Long time and repeated practice one action will make students bored, and also will make some parts overloaded.

### 5. Conclusion

Roller skating is a sports with a high requirement on practitioner's balance. At the same time, roller skating can cultivate the practitioner's balance and benefit to practitioner's overall physical quality. It is popular in students. However, how to decrease the probability of injury becomes to be the most important problem. This paper analyzed the common injury situation, and proposed strategy method.

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