## TRENDS AND REFLECTIONS

# Judo injuries: their repercussions on the practice of the sport

# Lesões no judô: repercussão na prática esportiva

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#### **ABSTRACT**

This study sought to verify the frequency of injuries during judo classes, the consequent time away from the practice of the sport, and the treatment used on judo athletes from gyms and clubs located in the city of Rio de Janeiro. Method: Thirty-five male athletes participated in the study, with ages between 8 and 30 years old, with a minimum involvement in the sport of 12 months. A validated and structured questionnaire was used for evaluation composed of 18 questions, both open and closed. Results and discussion: It was verified that the majority of the injuries occurred during the training process (82.86%) and most of the athletes remained away from the practice of the sport on average between 15 and 30 days. In relation

to therapy, it was observed that anti-inflammatory medicines were being used more frequently (71.4%), followed by rest (62.9%), immobilization (60%) and ice locally (cryotherapy) (51.4%). This treatment was associated with physiotherapy in 40% of the injuries. Surgical interventions were needed in 14.3% of the cases. Conclusion: the occurrence of injuries during judo practice predominates in the training period, and most athletes can recover in less than one month having a conservative treatment as the main therapeutic choice.

Keywords: Athletic Injuries, Martial Arts, Rehabilitation

## **RESUMO**

O objetivo deste estudo foi verificar a freqüência de lesões durante a pratica de judô, tempo de afastamento da atividade esportiva e tratamento utilizado em atletas federado praticantes de judô de academias e agremiações no Município do Rio de Janeiro. Método: Participaram do estudo trinta e cinco atletas, sexo masculino, com idade entre 8 e 30 anos e atividade mínima no esporte de 12 meses. Utilizou-se para avaliação um questionário estruturado validado, composto de 18 perguntas abertas e fechadas. Resultados e Discussão: Verificou-se que a maioria das lesões ocorreu durante os treinamentos (82,86%). A maioria permaneceu afastada da pratica esportiva em média entre 15 e 30 dias. Em

relação à terapêutica, observou-se que medicamentos antiinflamatórios foram freqüentemente utilizados (71,4%), seguindo-se repouso (62,9%), imobilização (60%) e gelo local (crioterapia) com 51,4%, sendo esta conduta associada à fisioterapia em 40% das lesões. Necessitaram de intervenção cirúrgica 14,3% dos casos. Conclusão: A ocorrência de lesões durante a prática de Judô predomina nos treinamentos, tendo a maioria dos atletas recuperação em tempo inferior a um mês, sendo a principal opção terapêutica o tratamento conservador.

**Palavras-chave:** Traumatismos em Atletas, Artes Marciais, Reabilitação

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#### INTRODUCTION

It is important to highlight the importance of creating judo athletes and not of judo fighters, for the former remain while the latter, similar to high-level athletes, have a limited career due to the physical jeopardy stemming from the frequency of injuries.<sup>1</sup>

Sports injuries fit into any and all types of aggravation that occur during physical activity, causing interruption of at least one training day afterwards.<sup>2</sup> Even though many factors contribute to this, among the main responsible factors we find what is called the Overtraining Syndrome.<sup>3</sup> Insufficient time to recover physical capacity, due to the demanding sports calendar or to an inappropriate diet, among other reasons, can predispose and facilitate the occurrence of injuries.<sup>4</sup>

For this reason this study was prepared seeking to verify the characteristic injuries in one sport that has been gaining popularity, which is the practice of judo and its repercussion on daily and sporting activities.

#### **METHODOLOGY**

In this study 35 federated athletes volunteered to participate: all males, with ages between 8 and 30 years old, judo practitioners from gyms, clubs or confederations, located in the municipality of Rio de Janeiro.

This study is in accordance with the norms 196/96 from the National Health Council, and it was approved by the Ethics Committee from UCB (protocol 0074/2007).

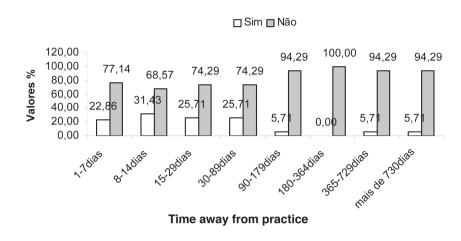
We utilized a specific questionnaire composed of eighteen open and closed questions, where we emphasized corporal location, type and frequency of occurrence of injuries, as well as the time away from practice and the treatment realized. The questionnaire was applied by the researcher himself.

To evaluate the data descriptive statistics and frequency analysis were used.

#### **RESULTS**

The average age of the participants was  $19.40 \pm 6.73$  years, with average time practicing the sport of  $9.3 2 \pm 6.95$  years and average weekly training frequency between  $4.06 \pm 1.21$  times per week.

The frequency for the occurrence of injuries during the sportive activity of judo in the trainings was 82.9%, while in the competi-



**Graphic 1** - Percentage of injured athletes in relation to the period away from training, regardless of the type and number of injuries and phase of occurrence

tions was 62.9%.

Below, graphic 1 shows the time away from practice for athletes due to injuries, regardless of the type and phase of occurrence, if during the training or during the competition.

Antiinflammatories were utilized in 71.43% of the cases, resting in 62.86% of the cases, immobilization in 60%, and ice (cryotherapy) in 51.4%, surgery intervention happened in approximately 14.3% of the cases. Physiotherapy was realized by 40% of the injured practitioners.

#### DISCUSSION

The high performance of competitive sports, including Judo, has created serious physical and psychosocial consequences for athletes involved in high level training.<sup>5</sup>

Despite not having been evaluated in this study, the influence of body weight is an important risk factor for the high rate of injuries, especially in training time. From 71% of the injury cases studied by Barsottini, 642% occurred due to higher body weight of the opponent.

It was observed in the present study that most injuries occurred during training time (82.86%), repercuting on the athletes daily life and influencing directly in the participation of athletes in competitions. This may be caused as much by lack of care on the part of the athlete during training, as to external factors inappropriate to the practice of judo.

Even though there is a high frequency of injuries, most athletes stayed away from their practice for short periods of time, that is, less than 30 days. Only a minority stayed away for 3 months or more, and in some cases two years.

Pakkari<sup>7</sup> presented an estimate for the occurrence of injuries in Judo, independently of its characteristics, utilizing the practice time of the sport. That study registered 18.3 injuries per 1,000 hours of sportive activity, which indicated that judo is a high risk sport.

Athletes who practice impact sports, such as judo, suffer repeated injuries due to transitory vibrations, which are derived from quick disacceleration forces such as falls, very frequent in judo, whose mechanical vibrations interfere with the comfort during practice and activity realized.<sup>8</sup>

#### CONCLUSION

We conclude that the occurrence of injuries during the practice of judo predominates in the training periods, with the time away from its practice for most athletes being less than a month. The main option for treatment was medication, especially antiinflammatories, followed by rest and immobilization.

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