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# Self-defence techniques and procedures, adapted for paraplegic persons independent in wheelchair, to counteract hetero-aggressive behavior



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#### Abstract

**Introduction**. Persons living in wheelchair are often target of hetero-aggressive behavior. The aggressors perceive persons in wheelchair as easy victims.

Objectives Acquisition of adapted self-defense techniques and procedures by young paraplegic persons, independed in wheelchair, to counteract some possible hetero-aggressive behavior against them.

**Material and methods**. A young male person, former sportsman (familiarised with wrestling techniques), living with T11 AIS-A (complete) paraplegia after a spinal cord injury and independent in wheelchair,

was instructed some various taekwondo techniques and maneuvres: blocking an attack with the hand at the head region (Olgul Jireugi), hand block (Olgul Maki), hand counteratack (Momntong Jireugi), foot attack at the head region (Olgul Dollyo Chagi), hand block (Sonnal Olgul Maki), hand counterattack (Arae Jireugi).

The young female who plays the role of attacker has black belt in taekwondo, therefore the maneuvres were performed in total safety, without endangering the pacient.

Both protagonists of this presentation have given written consent to be photographed and filmed, for academic purpose. The paper has the approval of the Ethics Committee of "Bagdasar-Arseni" Clinical Emergency Hospital, n.o. 17464/14.06.2019.

**Results:** We realized photographs and films depicting the aforementioned taekwondo techniques, to demonstrate some possible scenarios of aggression.

**Discussion** Acquisition of martial art techniques and procedures by paraplegic people, independent in wheelchair, is essential and may improve their safety, participation, self-esteem and quality of life.

**Conclusions:** Prevention, as a self defense method, is essential. The best way is to avoid conflictual situations, but ideal is to be prepared for any situation.

**Key words:** paraplegia, spinal cord injury segelae, taekwondo, self defense techniques, participation, quality of life,

#### Introduction

Wheelchair dependend individuals are often easy target, *victim* of aggressors, because they can't efficiently protect themselves in order to escape from a hetero-agresive, conflictual situation (1,2). Self defense techniques and procedures addapted for wheelchair users have a special semnification, because persons with disabilities are two times more susceptible for being attacked, according to the USA Bureau of Justice (3).

Material and methods A young male person, former sportsman (familiarised with wrestling techniques), living with T11 AIS-A (complete) paraplegia after a spinal cord injury and independent in wheelchair, was instructed some various taekwondo techniques and maneuvres: blocking an

attack with the hand at the head region (Olgul Jireugi), hand block (Olgul Maki), hand counteratack (Momntong Jireugi), foot attack at the head region (Olgul Dollyo Chagi), hand block (Sonnal Olgul Maki), hand counterattack (Arae Jireugi) etc.

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**Results** Photographs and films were realized to illustate possible scenarios of aggression the victim might experience. Limited by the editorial space, we have selected the most important and demonstrative ones (fig 1-5).







Fig. 1 Blocking an attack at the head region, with both hands







Fig. 2 Blocking an attack (grabbing the victim's shirt)







Fig. 3 Blocking a punch (an attack with the fist at the head region)







Fig.4 Hand blockage and counterattack







Fig. 5 Blocking a foot kick at the head and counterattack (a punch in the groin region)

**Discussion** Paulo Coelho quote that says: "fear generally manifests itself in two ways: through aggressivity or submission".

The purpose of this paper is to depict some simple martial art techniques, adapted for persons living with spinal cord injury sequelae. The aggressor can be countered through self-defense techniques performed by the victim, and this psychological aspect could provide an element of surprise [3,4].

Acquisition of self-defense techniques and procedures by paraplegic people, independent in wheelchair, may improve their safety, participation, self-esteem and quality of life [5, 6].

Conclusions: Prevention, as a self-defense method, is essential. The best way is to avoid conflictual situations, but ideal is to be prepared for any situation. It is not easy to find articles with this subject, aspect reflected also by the evaluation of all published articles in Balneo Research Journal until now [7].

## **Conflict of interest**

The authors have no conflict of interest to declare.

### **Author contributions**

Diana-Elena Serban is the female protagonist depicted in fig 1-5, contributed in processing the illustrations, and writing the manuscript.

Aurelian Anghelescu designed the study, contributed in editing pictures, writing, and rewuing the manuscript.

Elena Constantin realised and processed the illustrations.

Gelu Onose reward and aproved the final version of the paper.

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