Original Articles

TRIGGER-PULLING DEVICE FOR TARGET SHOOTING

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Abstract. A new trigger-pulling device which helps the high quadraplegic to participate in target shooting is presented

Key words: Sport for the disabled; Quadraplegic; Trigger-pulling device; Air rifling.

Introduction

SPORT is of great significance for the severely disabled and it can help him in three different ways (Guttman, 1976):

1. 'Sport can be of immense therapeutic value. It represents the most natural form of remedial exercise and can be successfully employed as a complement to the conventional methods of physiotherapy.'

2. 'The great advantage of sport over formal remedial exercise lies in its recreational value which provides an additional motivation for the disabled by restoring that pattern of physical activity and desire to express joy and pleasure in life so deeply inherent in any human being.'

3. 'Sport should become a driving force for the disabled to seek or restore his contact with the world around him and thus facilitate and accelerate his re-integration into the community and his recognition as an equal and respected citizen.'

The handicapped individual, in spite of his limitation has the same basic needs as a healthy person. The fundamental drive for success, recognition and approval are desired by every person, regardless of his physical possibilities (Adams, Daniel and Rullmann, 1972).

The severely handicapped can fully participate in target shooting. Children with muscular dystrophy can shoot wearing a wrist stabiliser. The C4 quadraplegics can shoot using a pistol machine-rest with a mouth-piece. They may also use a U-shaped barrel holder for air rifles attached to a camera tripod to aid the shooter in aiming the gun (Adams *et al.*, 1972, p. 107). For the C7, 8 quadraplegic we have introduced a new flexible spring-coil multi-directional mounting device for target shooting (Ohry and Talmor, 1978-79).

The Device

This new simple device allows the C5 quadraplegic to shoot with an air rifle. In Figure 1 the air rifle with the mounting device (which we have previously described) may be seen. Usually the weight of the gun is a major problem for those with severe involvement of upper extremities. Therefore, most quadraplegics are unable to participate in air rifling. We highly recommend this kind of sport with our flexible device to which the new and simple trigger device should

FIG. 1

The air rifle with the mounting device.

be added. Thus, even the C5 quadraplegic can shoot. The hand of the patient rests on the table while the contraction of the brachioradialis or biceps muscles will pull the trigger device.

SUMMARY

A new trigger-pulling device for rifle shooting by high quadraplegics is presented.

RÉSUMÉ

Un nouvel instrument permettant aux tétraplégiques d'appuyer sur la gâchette d'un fusil est présenté.

ZUSAMMENFASSUNG

Ein neues Gerät das Tetraplegikern ermöglicht auf einen Gewehrabzug zu drücken wird vorgestellt.

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