	ABSTRACT FORM XXII International Conference of Sport Rehabilitation and Traumatology London April 20th – 21st 2013	**Presentation preference** ***Preferenze per la presentazione*** ☐**Oral** X **Poster**

TITLE ***TITOLO***	**Effects of ultrasound-guided invasive physical therapy methods for treatment of the Adductor muscle strain : Case Report.**
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TOPIC ***ARGOMENTO***	**Case Report- Muscle**

TEXT - *TESTO* (4500 characters maximum spaces included– massimo 4500 caratteri spazi inclusi)

Introduction

Muscle`s injuries in soccer players are common and may be responsible for prolonged periods of loss of competitive activity. Therapeutic treatments using the resource of electrotherapy, kinesiotaping, platelet-rich plasma and ultrasound therapy, are the ones that we find out to accelerated the healing and reduce the recovery time. Two physical therapies invasive techniques, the percutaneous intratisular electrolysis (EPI) and percutaneous micro electrolysis (MEP), have been used in tendon and muscle`s injuries with positive practical results, but about that there still is little scientific evidence.

Purpose

To evaluate the efficiency of the treatment with EPI and MEP in the case of soccer player who injured the adductor muscles.

Matherial - Methods

The subject, 32 years old male, height 1,82 m, weight 79 kg, after making an abduction movement with his left leg during a soccer match at Concacaf Gold Cup 2011, felt pain in the middle part of the adductor muscle which made it impossible to continue the match. The tenderness point and pain-related-isometric contraction were found by the physical assessement. Also was found increased echogenicity in the portion of adductor magnus and longus by the ultrasound image, what suggested muscle strain.

During the first and second days were applied a RICE protocol and anti inflammatory medicines. In the third day started the EPI with ultrasound-guided (USg), which the intensity of electrical stimulation applied thru the acupuncture needle was 2, 3 and 4 mA (miliamper) for 8 seconds. In addition, tecatherapy was made to supplement the therapy.

In the fourth to the seventh day was made the MEP with USg, which the intensity of electrical stimulation applied thru the acupuncture needle was 400 μA (microamper) for one minute. In addition, tecatherapy and eccentric exercises were made to supplement the treatment.

After the end of the seventh day, the pain was once more verified and an ultrasound image was taken.

Results

Were found improvement of the movements and tenderness, pain completely decreased in isometric contraction and reduction echogenicity in the ultrasound image. This suggested a significant injury recovery. The athlete ended up the treatment and started the sport re-adaptation.

Conclusion

The use of utrasound-guided invasive therapy methods showed an excellent result in muscle injuries which provided quick return to sports activity. However, further studies are needed to clarify its biological effects and there is also needed some comparative studies with other physical therapies techniques to prove which comes to be the more effective.