

*Embargoed until Monday, Dec. 2, 2013, at 12:01 a.m. ET*

### Scientific Formal (Paper) Presentations

**CODE: VSMK31-09**

**SESSION: VSMK31**

**The Effects of US-guided Injection of Platelet-rich-Plasma (PRP) on the Degenerative Disease of the Achilles and Patellar Tendon in Athletes**

#### Date/Times

- **DATE: Tuesday**
- **TIME: 10:30 -10:40 AM**
- **LOCATION: E451B**

#### PARTICIPANTS

- Alice La Marra MD - Nothing to disclose.
- Lorenzo Maria Gregori undefined - Nothing to disclose.
- Silvia Mariani MD - Nothing to disclose.
- Luigi Zugaro undefined - Nothing to disclose.
- Antonio Barile undefined - Nothing to disclose.
- Carlo Masciocchi undefined - Nothing to disclose.

#### SUBSPECIALTY CONTENT

- Musculoskeletal Radiology

#### PURPOSE

To evaluate and show the result of injection with Platelet Rich Plasma (PRP) of tendinosis of Achilles and Patellar tendon in athletes.

#### METHOD AND MATERIALS

In the last three years we evaluated 50 athletes with degenerative tendinosis of Achilles tendon and 30 athletes with degenerative tendinosis of patellar tendon. All the patients were first evaluated through diagnostic testing (MRI and US guided) and then through clinical observations (VAS for pain and VISA-A and VISA-P for functionality). The patients underwent a cycle of platelet rich plasma US-guided infiltrations every 21 days for a total of three treatments. Another MRI was performed 30 days and one year after the last infiltration.

#### RESULTS

In the patients with tendinosis of Achilles tendon we have found an improved overall by 80% (VAS) and 53% (VISA-A). Relatively to the patellar tendon, the VAS value is increased of 75% (VAS) and 50% (VISA P). We observed partial or complete morphological recovery and normalization of MRI signal in 90%. We observed a reduction of sectional area in the Achilles tendon in 39/50 cases and in the patellar tendon in 18/30 cases. Eight patients with tendinosis of Achilles tendon presented an area increased by 10% and five patients with tendinosis of patellar tendon presented an area increased by 15%. The mean VAS at one year of treatment improved in all cases overall by 70%.

#### CONCLUSION

Our study showed that in patients who underwent PRP treatments there was an improvement of the functionality, a decrease in pain and a normalization of the signal intensity seen on MRI. Therefore, our experience proves that PRP infiltration may be a good therapeutic alternative for the treatment of Achilles and patellar tendinopathy in athletes.

#### CLINICAL RELEVANCE/APPLICATION

The US-guided PRP treatment in case of degenerative tendon diseases may increase Achilles and Patellar tendons functionality and reduce recovery times in athletes.