Introduction
Carpal tunnel syndrome (CTS) is a common and sometimes challenging condition, which causes pain; paresthesia; tingling of the thumb, index and long fingers; and even thenar weakness in the hands. The endoscopic transcarpal ligament (TCL) released is effects but need more time for nerve regeneration in previous studies. In recent years, platelet-rich plasma (PRP) has proven to be an alternative as it encourages nerve regeneration.

Material & Methods
From 2012 to 2014, we rolled 32 patients with mild or moderate CTS, the mean aged was 57.6 (range 50-68 years). There were 24 female and 8 male patients in our series and they all underwent endoscopic TCL release with one shot PRP injection. They were randomly assigned to two groups: (i) a control group using only an endoscopic TCL release, and (ii) a platelet-rich plasma group that received endoscopic TCL release with a single local injection of platelet-rich plasma. The outcome measures were assessed via Visual Analogue Scale, the Boston Carpal Tunnel Syndrome Questionnaire and electrophysiological findings including the peak latency of sensory nerve action potential and the onset latency of the compound muscle action potential. All patient underwent one portal endoscopic TCL release (Agee system, 3M). After skin suture closed, the PRP was injected to carpal tunnel region via 22# IV catheter. After operation, all patient follow up at our OPD regularly.

Results
We hereby describe a patient with moderate CTS showing significant improvements early in electrophysiological parameters after receiving endoscopic TCL release with PRP injections group. The results revealed significant improvements in the distal motor and sensory latencies as well as the sensory nerve action potential and compound muscle action potential amplitudes of the both median nerves.
There were no significant differences in mild CTS between the two groups except for the median mean latency of sensory nerve action potential which was significantly higher among the patients in the PRP injected group (p = 0.03). But in moderate CTS, there were significant differences (p<0.05) between two groups. All the measured variables significantly decreased in both groups after 10 weeks of treatment except for the median onset latency of the compound muscle action potential (p = 0.472). Finally, the changes in moderate CTS of the evaluated outcome measures were found to significantly differ between the two groups.

Discussion
1. Significant improvements were observed in pain and symptom severity and functional status of patients, assessed according to the VAS and BCTQ and also electrophysiological parameters, in both groups. However, the differences between the two groups of patients were statistically significant in PRP group for moderate CTS.
2. In the most recent study, Wu et al. found results favoring PRP plus splinting over splinting alone but only at 6 months follow-up, results at shorter follow-up intervals being similar to our own. It is therefore possible that PRP may exhibit a delayed effect. In our study, revealed PRP had helpful for nerve regeneration. That is the reason why had significant results in moderate cases.

Conclusion
Patients with moderate CTS underwent arthroscopic TCL release with PRP injection get more early recovery of symptoms and nerve.