European **Rev**iew for **Med**ical and **Pharmacol**ogical **Sci**ences 2015; 19: 1

Letter to the Editor

Effect of posterior subtenon injection of 40 mg of triamcinolone acetonide on glycemic control and serum cortisol and adrenocorticotropic hormone in diabetic patients

Dear Editor,

We have read the article "Effect of posterior subtenon injection of 40 mg of triamcinolone acetonide (TA) on glycemic control and serum cortisol and adrenocorticotropic hormone in diabetic patients" with interest[1]. The authors concluded that the subtenon injection of 40 mg of triamcinolone acetonide (TA) does not significantly alter serum fasting blood glucose levels in diabetic patients. We want to thank to the authors for their contribution to the literature that has clinical significance.

It is known that locally administrated corticosteroids may have systemic side effects. It may increase the blood glucose levels in patients with diabetes. TA injection can be applied in three regions of the body: intra-articular, epidural and posterior subtenon space. In the studies about the injection of TA, fasting glucose level (FGL) is measured at least every day for one week after the injection[2-5]. Most papers that measured the FGL daily after TA injection reported increased fasting glucose levels[2-5]. But in the current study fasting glucose measurement were done at first day, one week, one month, two months, and three months after the injection. However, the effect of TA on fasting blood glucose level may best be determined in the first week with strict follow-up. As mentioned in the study, significant levels of TA can be detected in 100% of samples at 3 hours and 24 hours after the injection, and in 28.57% at 1 week. So, measurement of fasting glucose at the first, second and third months does not seem reasonable.

During the injection into the subtenon space, some of the drug may disperse into the subconjunctival space. This may also cause insufficient application of TA, conjunctival necrosis or scleritis[6]. We want to ask to the authors whether they strictly controlled the injection site of the drug. Inadvertent subconjunctival injection may affect the FGL after TA injection.

Conflict of Interest

The Authors declare that they have no conflict of interests. The authors of this study did not receive any financial support for this submission.

References

1) Kaderli B, Kivanc SA, Inan UU, Ersoy C, Yucel AA, Yilmaz S, Avci R. Effect of posterior subtenon injection of 40 mg of triamcinolone acetonide on glycemic control and serum cortisol and adrenocorticotropic hormone in diabetic patients. Eur Rev Med Pharmacol Sci 2014; 18: 2609-2614.
2) Catalano LW, 3rd, Glickel SZ, Barron OA, Harrison R, Marshall A, Purcelli-Lafer M. Effect of local corticosteroid injection of the hand and wrist on blood glucose in patients with diabetes mellitus. Orthopedics 2012; 35: e1754-1758.
3) Even JL, Crosby CG, Song Y, McGirt MJ, Devin CJ. Effects of epidural steroid injections on blood glucose levels in patients with diabetes mellitus. Spine 2012; 37: E46-50.
4) Habib GS, Miari W. The effect of intra-articular triamcinolone preparations on blood glucose levels in diabetic patients: a controlled study. J Clin Rheumatol 2011; 17: 302-305.
5) Kim WH, Sim WS, Shin BS, Lee CJ, Jin HS, Lee JY, Roe HJ, Kim CS, Lee SM. Effects of two different doses of epidural steroid on blood glucose levels and pain control in patients with diabetes mellitus. Pain Physician. 2013; 16: 557-568.
6) Eslampour A, Abrishami M, Tafaghodi S. Conjunctival necrosis and scleritis following subtenon triamcinolone acetonide injection. Iran Red Crescent Med J 2013; 15: 614-616.

Ü. Yolcu[1], A. Ilhan[2]
[1]Ophthalmology Department, Sarikamiş Military Hospital, Kars, Turkey
[2]Ophthalmology Department, Erzurum Military Hospital, Erzurum, Turkey

Corresponding Author: Umit Yolcu , MD; e-mail: umit_yolcu@hotmail.com