

Letter to Editor

Letter to the editor in response to the article “The effect of laser epilation on recurrence and satisfaction in patients with sacrococcygeal pilonidal disease: a prospective randomized controlled trial” by Demircan et al. Int J Clin Exp Med 2015; 8(2): 2929-2933

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I have read the paper called “The effect of laser epilation on recurrence and satisfaction in patients with sacrococcygeal pilonidal disease: a prospective randomized controlled trial” written by Demircan et al. in the issue of 2015; 8(2) of your journal with a great interest and curious manner [1]. I would like to congratulate and thank these writers for adding this prospective randomized paper related to the pilonidal sinus in the literature that is an area of interest of mine.

The paper which has an interesting heading has surprising results, as well. I would like to share my observations about the paper which has relatively assertive results.

1. As stated in the material-method of the paper, writers have applied epilation twice in total by using Alexandrite Laser Epilation Device which has 755 nanometer wave lengths, 2 weeks before the surgery and 3 weeks after the surgery to the patients in the second group. There are important topics to talk and questions to answer. As you know it, laser epilation is elimination of unwanted hairs by using laser beams with special wave length. It is an effective and safe method applicable to body within a brief period of time. Alexandrite Laser Epilation Device is one of the most effective systems which are used in the paper [2]. For that reason, it provides permanent and long

duration epilation in most of the patients. However, it should be applied in sessions for epilation to be effective and to have all covered. Because, laser beam only affects the hair roots in the phase of anagen (active). For that reason, when telogen (passive) roots get activated, they will require application, as well. Since hairs are at the different phases at the same time, some hairs will be left after every phases. For that reason, it requires multiple sessions [3]. The reason is not only the phases of the hair but also color of hair, genetic factors, hormonal condition, age, weight and medicines used by the person are important for the efficiency of the epilation. For that reason, the number of the epilation session and its efficiency differ among the individuals [3, 4].

a. In the light of the information given, when we reconsider the material-method of the paper; there applied a laser application twice and reported an assertive result by disregarding factors that affect the epilation and other factors that I have mentioned earlier without examining the hair structure of the sacrococcygeal regions of the patients.

b. What's more, it is not controlled and specified whether laser epilation applied twice is really effective or not. However, the number of the effective laser application is 4-6 times on average in the literature [3-7].

c. When considered from this point of view, it will be wrong to defend that laser application applied in a fashion that we do not know whether it is efficient and applied all of the patients in the same way or not regardless of the characteristics of the patients over the pilonidal sinus relapses. This information should be given in the material method in a more detail manner, particularly the section of laser epilation should be more clear.

2. At the present time; the most reasonable theory of pilonidal sinus illness in the scope of etiology and etiopathogenesis; is developed by the Karydakis who is the inventor of the flap method that is applied by the writers as a technique. Karydakis expressed that etiology of pilonidal sinus is acquired later as a result of thirty five years of work. According to Karydakis, the foundation of pilonidal sinus is the process of hair penetration. Three main factors play a part in the hair insertion process: the invader (H), consisting of loose hair; some force (F) which causes hair insertion; and the vulnerability of the skin (V) to the insertion of hair at the depth of the natal cleft. If these three main factors occur, then hair insertion and pilonidal sinus result and the following equation can be used to calculate the possibility of pilonidal sinus: $H \times F \times V$ [8, 9]. As we can understand from the rule of Karydakis, “hair” is the underlying reason. The problem starts with the hairs falling down to sacrococcygeal region or hairs in sacrococcygeal region which expired to fall down to same region (that are loose hairs). In order to prevent this, controlled hair cleaning is recommended. The “hair” underlying the illness will be eliminated if there is a controlled hair cleaning in the sacrococcygeal region and around (ratio of loose hair falling down to region will significantly decrease in the region) and loose hairs falling down from the upper part of the body is removed from the region regularly. When we considered it in this point of view; the findings of the paper contradict with the Karydakis’ theory describing the surgery method that is adopted and applied by the writers. In my opinion, the reason is for that laser epilation is not conducted properly.

3. Another point which has been discussed about the laser epilation in the literature is that how long after operation should be made. General opinion is that it can start right after the healing of wound. It is applied in the third

week in the paper submitted by the Demircan et al. and this period of time is appropriate for the wound healing. The question I would like to ask; writers stated that 5 patients have wound infection and 5 patients have wound separation in the epilation group in Figure 3. Does this condition institute any problem for epilation applied in the third week? In parallel with the result of this study, can we send patients to epilation safely even if they have infections?

4. Writers present a prospective study. As you know, you can have truer information in well-organized prospective studies rather than the retrospective studies. However, data contributed by the retrospective works to literature should not be ignored anytime. It is stated in the paper that the importance of the retrospective work is low and conducted study is highlighted. In my opinion, the reliability and reality of the study will enhance if important details required to be explained in the material-method section are explained thanks to the reasons I have specified above.

Disclosure of conflict of interest

None.

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References

- [1] Demircan F, Akbulut S, Yavuz R, Agtas H, Karabulut K, Yagmur Y. The effect of laser epilation on recurrence and satisfaction in patients with sacrococcygeal pilonidal disease: a prospective randomized controlled trial. *Int J Clin Exp Med* 2015; 8: 2929-33.
- [2] Gan SD, Graber EM. Laser hair removal: a review. *Dermatol Surg* 2013; 39:823-38.
- [3] Elçin G. Laser Epilation. *Turkderm* 2012; 46: 10-14.
- [4] Mittal R, Sriram S, Sandhu K. Evaluation of Long-pulsed 1064 nm Nd: YAG Laser-assisted Hair Removal vs Multiple Treatment Sessions and Different Hair Types in Indian Patients. *J Cutan Aesthet Surg* 2008; 1: 75-9.
- [5] Girgin M, Kanat BH, Ayten R, Cetinkaya Z, Kanat Z, Bozdağ A, Turkoglu A, Ilhan YS. Minimally invasive treatment of pilonidal disease: crystallized phenol and laser depilation. *Int Surg* 2012; 97: 288-92.

Letter to editor in related to “laser epilation effects”

- [6] Oram Y, Kahraman F, Karıncaoğlu Y, Koyuncu E. Evaluation of 60 patients with pilonidal sinus treated with laser epilation after surgery. *Dermatol Surg* 2010; 36: 88-91.
- [7] Conroy FJ, Kandamany N, Mahaffey PJ. Laser depilation and hygiene: Preventing recurrent pilonidal sinus disease. *J Plast Reconstr Aesthet Surg* 2008; 61: 1069-72.
- [8] Karydakis GE. New approach to problem of pilonidal sinus. *Lancet* 1973; 11: 144-5.
- [9] Karydakis GE. Easy and successful treatment of pilonidal sinus after explanation of its causative process. *ANZ J Surg* 1992; 62: 385-9.