

Comparison of Cleaning up Eyelids after Taking off False Eyelashes between Eye Makeup Remover Alone and Eye Makeup Remover with Ocusoft®

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Background: Nowadays, false eyelashes are used widely in adolescence to working women in Thailand. But none of those is aware of cleaning their eyelids after peeling off false eyelashes and use no special products to remove the adhesive glue. The residue may cause dry eyes, eyelid inflammation or infection of the cornea.

Objective: This research study compares the residue of glue along the eyelashes after using eye cleansing products alone or combination with Ocusoft®.

Material and Method: Randomized clinical trial to collect information from all interested participants in Thammasat University Hospital, between March to June 2015. We randomly selected eyes wipe with cleansing products and Ocusoft® and other eyes with cleansing products and water, then took a photo to count the amount of residue glue remaining along the lashes line. Statistical analysis use Paired t-test.

Results: All studied participants were female, mean age 31.59 years, showed no statistical significance between the eyes with Ocusoft® and water (p-value = 0.3251).

Conclusion: There is no difference between cleaning eyelashes with Ocusoft® and cleaning lashes with water. Thus, the cleaning of the eyelid either with water or Ocusoft® was not adequate after removal of false eyelashes.

Keywords: False eyelashes, Eye makeup remover, Cleaning up, Eyelids, Ocusoft®

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It's undeniable that a large number of women have become more interested in beauty and cosmetic⁽¹⁾. Although different cultures have various styles of beauty, face and eyes are considered as the first and foremost priority which women focus on⁽²⁾.

Attractive eyes should be composed of eyelashes which are extremely thick and long. These is the perfect combination to make their eyes charming⁽³⁾. Consequently, more and more ladies manage to find many tangible approaches in order to change their simple eyes into outstanding looking, such as with the use of mascara⁽⁴⁾, false eyelashes, eyelash extensions⁽⁵⁾, topical eye drops⁽⁶⁾ and eyelash transplantation⁽⁷⁾. In this regard, those methods are guaranteed by the Food and Drug Administration (FDA).

In Thailand, false eyelashes are the most

popular method among adolescents and among working-age group. Because false eyelashes are produced from hair and nylon, this means that if some people attach them incorrectly, this will cause corneal ulcers which can create friction between eyelashes and cornea. Furthermore, compounding the potential problem, eyelash glue might lead to dermatitis around eyelids. With regard to the glue, the main ingredient may be a different formula depending on the brand such as rubber latex, water cellulose gum, sodium dodecylbenzenesulfonate and formaldehyde.

Apart from problems arising from false eyelashes and the eyelash glue, cleaning the eyelid might also cause serious problems relating to how much chemical residue remains after a woman cleans up her eyes. There are many types of cleansers such as oil, cream and water-form. Those substances could contribute to changing the proportion of tears. Following this, a lot of bacteria can accumulate caused of dry eyes, Meibomian Gland Dysfunction and corneal ulcers.

This research will outline the methods how to clean the eyelids after sloughing the false eyelashes in

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order to reduce dangerous eye problems.

We would like to present Ocusoft® which is designed specifically for eye cleansing. As a result, it is chosen for curing blepharitis. The product can remove all dirtiness, eye discharge and other debris which can decrease blepharitis and Meibomian Gland Dysfunction.

The present study will examine how to distinguish between eye remover alone and use of Ocusoft®.

Material and Method

The research complied with the data from participants who were selected by our criteria in Thammasat Hospital.

Inclusion criteria

- Female
- Age range 20-50 years old
- Normal eye health

Exclusion criteria

- Allergy to glue or false eyelashes
- Allergy to eye makeup remover or Ocusoft®

According to statistics, the number of samples was 32 and the approach of research is a randomized control trial. The study was allowed by Human Research Protection Unit, Thammasat University. All of the participants were in favor of revealing their personal information such as name, gender, allergy, opinions and others. After the research had been completed, they obtained all the results to their many advantages.

Firstly, the volunteers had attached false eyelashes on both eyes during the six-hour control period. After that, both eyelashes were removed with the same cleanser (Bifesta®) then one side was cleaned with the foam-Ocusoft® (0.5 ml) whereas the other side was removed with pure-water (0.5 ml). The participants cleaned their eyelids twice; none of them acknowledged which side used the Ocusoft®. By doing this, we took

photos at both eye-sides by Slit-lamp, then the photos were thoroughly evaluated for Meibomian Gland Dysfunction (modified from Bron et al, 1991)⁽⁸⁾. To illustrate, debris on eyelashes were carefully counted and recorded in order to discriminate between Ocusoft® and eye remover use. In addition, a senior researcher took part in this study for the final summary.

Statistical analysis

Data were reported in number of debris and analyzed by paired t-test.

Ethics

Informed written consent was obtained from all participants before the operation at department of ophthalmology or at operating room. The present study had approved by the Human Research Ethics Committee of Thammasat University (No. 1: Faculty of Medicine), Thailand. The authors verified that all applicable institutional and governmental regulations concerning the ethical use of human volunteers were followed during this study, adhering to the tenets of the Declaration of Helsinki.

Results

The table below shows the number of problematic samples which existed after cleaning the eyelids.

With regard to debris counting, the average of the debris which passed Ocusoft® use is 1.375 while the debris in other eye was slightly less than the former, accounting for 1.094 pieces. Clearly, the results from both methods are not significantly statistical difference.

Discussion

Depending on general cleanser, they were deemed as having removed some cosmetics and dirtiness but some eyelash glue debris was not removed. No product is designed for removing that debris. As a consequence, we used the Ocusoft® to clean the eyelids. In comparison with water eye remover,

Table 1.

Symptoms	The number of disordered samples after use of	
	Eye remover with Ocusoft®	Eye remover with water
Irritation	6	5
Burning	17	5
Itching	2	3

use of Ocusoft® is slightly more effective as opposed to use of water eye remover (p -value = 0.325). Both of the approaches still have some residue. In the long-term, they might lead to blepharitis or Meibomian Gland Dysfunction; however, Ocusoft® can reduce chronic blepharitis. As a result, the research should be followed over the long term.

Regarding this study, some factors could not be controlled such as the amount of the eyelash glue and differences of physical cleaning. Despite strict controlling, the amount of debris might not be exactly correct.

Turning to the symptoms, we can see from the table that the highest number of burning eyes is from volunteers who used Ocusoft®. This means that some substances result in eye irritation. For water eye remover-use group, a few individuals had problems perhaps caused by the eye remover. However, none of the participants were allergic or had any complications after product use.

Conclusion

There is no difference between cleaning eyelashes with Ocusoft® and cleaning lashes with water. Thus, the cleaning of the eyelid either with water or Ocusoft® was not adequate after removing the false eyelashes.

What is already known on this topic?

There had been no research about cleaning eyelashes after taking off false eyelashes before this research

What this study adds?

As regards the research, it brings new knowledge and experiments about Ocusoft® about

cleaning up general cosmetics, but it was not able to remove artificial eyelash glue totally. Therefore, it is necessary to study these topics more in order to find other products which can remove cosmetics, particularly glue stains.

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Potential conflicts of interest

None.

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เปรียบเทียบการทำความสะอาดเปลือกตาหลังลอกขนตาปลอมระหว่างผลิตภัณฑ์เวชสำอางหรือรวมกับการใช้ออกคิวซอฟท์ (Ocusoft®)

มัญชิมา มะกรวัฒน์, วชิรา สนธิไชย

ภูมิหลัง: ในปัจจุบันมีการติดขนตาปลอมกันอย่างแพร่หลายในผู้หญิงไทย ตั้งแต่วัยรุ่นจนถึงวัยทำงาน แต่ไม่มีผู้ที่ตระหนักถึงการทำความสะอาดเปลือกตาหลังลอกขนตาปลอม และในประเทศไทยยังไม่มีผลิตภัณฑ์ที่เฉพาะสำหรับทำความสะอาดคราบขาว ซึ่งการตกค้างดังกล่าวอาจก่อให้เกิดเปลือกตาอักเสบ ตาแห้ง หรือแผลติดเชื้อที่กระจกตาตามมาได้

วัตถุประสงค์: เพื่อเปรียบเทียบการตกค้างของกาวติดขนตาปลอมตามแนวขนตาหลังการลอกขนตาปลอม หลังการใช้ผลิตภัณฑ์ทางเวชสำอางทั่วไป อย่างเดียวหรือรวมกับการใช้ออกคิวซอฟท์ (Ocusoft®)

วัสดุและวิธีการ: การวิจัยศึกษาแบบสุ่มตัวอย่าง (Randomized control trial) เก็บข้อมูลจากผู้สนใจเข้าร่วมงานวิจัย ในบริเวณโรงพยาบาลธรรมศาสตร์เฉลิมพระเกียรติ ในช่วงเวลาระหว่าง เดือนมีนาคมถึงเดือนมิถุนายน พ.ศ. 2558 โดยมีการสุ่มเลือกตาที่เช็ดด้วยผลิตภัณฑ์เวชสำอางร่วมกับออกคิวซอฟท์ (Ocusoft®) และตาอีกข้างเช็ดด้วยผลิตภัณฑ์เวชสำอางร่วมกับน้ำเปล่าแล้วถ่ายรูปเพื่อนำมานับจำนวนคราบขาวที่ตกค้างอยู่ตามแนวขนตา จากนั้นนำมาวิเคราะห์ผลทางสถิติโดยใช้ Paired t-test

ผลการศึกษา: มีผู้เข้าร่วมวิจัยทั้งหมด 32 ราย เป็นเพศหญิง อายุเฉลี่ย 31.59 ปี พบว่าไม่มีความต่างอย่างมีนัยสำคัญทางสถิติระหว่างตาที่เช็ดด้วยผลิตภัณฑ์ออกคิวซอฟท์ (Ocusoft®) และน้ำเปล่าโดยค่า $p\text{-value} = 0.3251$

สรุป: หลังการลอกขนตาปลอมออกการทำความสะอาดด้วยผลิตภัณฑ์เวชสำอางทั่วไปร่วมกับผลิตภัณฑ์ออกคิวซอฟท์ (Ocusoft®) พบว่าไม่ต่างจากการทำความสะอาดด้วยผลิตภัณฑ์เวชสำอางทั่วไปร่วมกับน้ำเปล่า ดังนั้นการทำความสะอาดเปลือกตาด้วยผลิตภัณฑ์เวชสำอางทั่วไปร่วมกับออกคิวซอฟท์ (Ocusoft®) หรือน้ำเปล่าอาจยังไม่เพียงพอ
