improve the quality of patient care but also can provide clinical information of disease related skin lesions.

Methods: We described and quantified dermatologic consultations in our hospital during from March 2013 to March 2014. We retrospectively studied the records of 2,018 hospitalized patients for which a dermatologist consultation was requested.

Results: The most common skin disorders of consult patients were drug eruption (9.86%), contact dermatitis (9.37%), dermatomycosis (6.00%), xerotic eczema (5.55%), seborrheic dermatitis (5.10%) etc. The most common reasons for consultation were dermatologic disease, conditional diseases related to treatment and skin lesions of systemic diseases.

Conclusion: This study provides useful data on the incidence and the characteristics of inpatients dermatologic problems. Keyword: Consultation, Inpatient, Dermatology

P101

Comparison of the Q-switched Nd:YAG and ruby lasers in treating semi-permanent make up

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Background: Lasers based on the principle of selective photothermolysis are now being used to remove semi-permanent make up with various outcomes. Choosing the right laser for the specific semi-make up color is necessary for successful outcome.

Objectives: The purpose of this study was to compare the effect of Q-switched Nd:YAG laser and Q-switched Ruby laser irradiation on black color semi-permanent make up on rat skin. And, in order to set a guideline for the black color semi-permanent make.

Methods: Six black artificial tattoos on rat skin were treated with two kinds of Q-switched lasers: a Medlite II Biomedical Q-switched Nd:YAG laser (1064 nm, 20 nanoseconds, 2.0mm spot size, 63/cm²) and Melastar Q-switched Ruby laser (694nm, 40 nanoseconds, 2.5mm spot size, 8-10 J/cm²). The authors used each lasers to irradiate pair of artificial tattoos on the same day of semi-permanent make up, 3 days after, 5 days after, 1 week after, 3 weeks after and 5 weeks after.

Each artificial tattoos were irradiated 6 times. Then, checked the pigment level of laser irradiated sites with Mexameter® Pigmentation probe. And obtained the sample of tissue after 6 times irradiation.

Results: Overall, the Q-switched Nd:YAG laser had a significant difference in semi-permanent make up lightening compared to the Q-switched ruby laser according to RMI and histopathological result.

Conclusion: The Q-switched Nd:YAG laser was slightly superior to the Q-switched ruby laser on removing black semi-permanent make up.

Keyword: Semi-permanent make up, Q-switched ND:YAG laser, Q-switched ruby laser

P102

Arctin inhibits hydrogen peroxide-induced senescence and cell death in human dermal papilla cells

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Background: Arctin is an active lignin isolated from Arctium lappa and has anti-inflammation, antimicrobial, and anti-carcinogenic effects.

Objectives: To find that arctin exerts antioxidative effects on human hair dermal papilla cells (HHDPcs).

Methods: To better understand the mechanism, we analyzed the level of hydrogen peroxide (H2O2)-induced cytotoxicity, cell death, ROS production and senescence after arctin pretreatment of HHDPcs.

Results: The results showed that arctin pretreatment significantly inhibited the H2O2-induced reduction in cell viability. Moreover, H2O2-induced sub-G1 phase accumulation and G2 cell cycle arrest were also downregulated by arctin pretreatment. The increase in intracellular ROS mediated by H2O2 was drastically decreased in HHDPcs cultured in the presence of arctin. This effect was confirmed by senescence associated-beta galactosidase (SA-β-gal) assay results: we found that arctin pretreatment impaired H2O2-induced senescence in HHDPcs. Using microRNA (miRNA) microarray and bioinformatic analysis, we showed that this
anti-oxidative effect of arctiin in HHDPCs was related with mitogen-activated protein kinase (MAPK) and Wnt signaling pathways.

**Conclusion:** Our data suggest that arctiin has a protective effect on ROS-induced cell dysfunction in HHDPCs and may therefore be useful for alopecia prevention and treatment strategies.

Keyword: Arctiin, Human hair dermal papilla cells

**P103**

**Comparative study of fractional laser-assisted vs conventional photodynamic therapy for the treatment of actinic cheilitis**

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**Background:** Early identification and treatment of actinic cheilitis (AC) is recommended. Although photodynamic therapy (PDT) is an attractive therapeutic option for AC, PDT for AC does not result in the same satisfactory outcomes as actinic keratosis (AK).

**Objectives:** To compare efficacy, recurrence rate, cosmetic outcome, and safety between Er:YAG ablative fractional laser-assisted methyl aminolevulinate-PDT (Er:YAG AFL MAL-PDT) and standard MAL-PDT.

**Methods:** 33 patients with histologically confirmed AC randomly received either 1 session of Er:YAG AFL MAL-PDT or 2 sessions of MAL-PDT. In the MAL-PDT group, the second session of MAL-PDT was administered 7 days later. Patients were followed at 1 week and 3 and 12 months, and cosmetic outcomes were assessed at the 12-month follow-up. Adverse events were assessed at 1 week of the treatment phase and every subsequent follow-up visit.

**Results:** 3 months after the last treatment session, Er:YAG AFL MAL-PDT was significantly more effective (92.3% complete clinical response rate) than MAL-PDT (58.8%; P = 0.030), and differences in efficacy remained significant at the 12-month follow-up (84.6% in Er:YAG AFL MAL-PDT and 29.4% in MAL-PDT). The recurrence rate was significantly lower for Er:YAG A0FL-PDT (8.3%) than for MAL-PDT (50.0%) group at 12 months (P = 0.029). No significant difference in cosmetic outcome or safety was observed between Er:YAG AFL-PDT and MAL-PDT.

**Conclusion:** AFL pretreatment has significant benefit for the treatment of AC with PDT.

Keyword: Actinic cheilitis, Er:YAG ablative fractional laser, Methyl aminolevulinate photodynamic therapy

**P104**

**Stimulatory effect of herbal mixture extract on keratinocyte differentiation**

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**Background:** Disturbance in keratinocyte differentiation is linked to several skin diseases such as psoriasis and atopic dermatitis

**Objectives:** We prepared herbal mixture extract (HME) consisting of Ligustrum lucidum Aiton, Astragalus membranaceus Bunge, Citrus unshiu Markovich and Angelica dahurica root. We demonstrated that HME enhanced keratinocyte differentiation and barrier functionality

**Methods:** Cultured keratinocytes were treated with HME, and keratinocyte differentiation was checked.

**Results:** HME treatment resulted in induction of keratinocyte differentiation, in terms of increase of differentiation markers such as keratin1, involucrin, loricrin and filaggrin. HME increased the involucrin and loricrin promoter activity, indicating that HME increased the gene expression at the mRNA level. When HME was applied topically on the tape-stripped mouse skins, it accelerated the reduction of transepidermal water loss (TEWL), indicating the fast recovery of barrier function. Parallel with this result, immunohistochemistry showed that HME increased the filaggrin level in tape-stripped mouse skins.

**Conclusion:** These results suggest that HME may be applicable for keratinocyte differentiation-related skin diseases.

Keyword: Herbal mixture extract, Keratinocytes, Differentiation

**P105**

**Pressure distribution effect of foam dressing in pressure ulcer animal model**