

## 论文

### 沈阳农村居民手背部皮肤纹理与日光暴露关系

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#### 摘要:

**目的** 了解中国北方地区农村居民皮肤纹理与日光暴露的关系。**方法** 采用整群抽样方法抽取长期居住在辽宁省沈阳市王滨乡的当地居民361人作为调查对象,对收集到的手背部皮肤图像评定老化级别,使用Image-Pro Plus 5.0图像分析软件测量皮肤纹理间距、纹理形成的角度和网格数。**结果** 沈阳农村居民日光高暴露和低暴露组皮肤老化级别平均值分别为(4.48±1.14)和(3.65±1.43)分,达到老化的人数分别为154和97人,老化比例分别为83.7%和54.8%;各年龄组日光高暴露组皮肤老化水平和老化比例均高于低暴露组,但差异均无统计学意义( $P>0.05$ );年龄10~19和30~49岁及老化级别为4~6级时,日光高暴露组农村居民手部皮肤纹理的最大角度均大于低暴露组( $P<0.05$ )。**结论** 沈阳市农村居民皮肤纹理形成的角度与日光暴露密切相关。

**关键词:** 皮肤老化 皮肤纹理 日光暴露 农村居民

### Corelation between dorsal hand skin texture and sun light exposure among residents in rural area of Shenyang

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#### Abstract:

**Objective** To explore the effects of sun light exposure on skin texture in rural residents of north China.**Methods** Totally 361 subjects who lived most of their times in Wangbin town, Shenyang city, Liaoning province were recruited with cluster sampling. Skin aging grade of dorsal hand skin images of subjects was evaluated. Four skin texture parameters (distance, the number of angle, the max angle, and grids) were measured by using Image-Pro Plus software. **Results** The mean skin aging grade of high and low sun light exposure group was 4.48±1.14 and 3.65±1.43, with the number of residents with aged skin of 154 and 97, and the rate of skin aging of 83.7% and 54.8%, respectively. Skin aging grade and skin aging ratio of the subjects with high sun light exposure were higher than the subjects with lower exposure but without significant difference between the two groups ( $P>0.05$ ). For the residents aged 10-19 years and 30-49 years or with the skin age grade of 4-6, the max angle was significantly higher in the subjects with higher sun light exposure than the subjects with lower exposure. **Conclusion** The angle formed by texture was significantly related to sun light exposure among rural residents in Shenyang municipality.

**Keywords:** skin aging skin texture sun light exposure rural resident

收稿日期 2012-06-05 修回日期 网络版发布日期

DOI: 10.11847/zgggws2012-28-10-26

基金项目:

国家自然科学基金(30700652)

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#### 参考文献:

- [1] Gonzaga ER. Role of UV light in photodamage, skin aging, and skin cancer: importance of photoprotection[J]. Am J Clin Dermatol, 2009, 10(Suppl 1): 19-24.

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- [2] 张玉彬,潘建英,帕它木,等.长波紫外线对皮肤健康的影响[J].中国公共卫生,2006,22(4):494-496.
- [3] Oliveria SA,Saraiya M,Geller AC,et al.Sun exposure and risk of melanoma[J].Arch Dis Child,2006,91(2):131-138.
- [4] Dianne EG,Frederick U,Francis PG,et al.UV doses worldwide[J].Photochemistry and Photobiology,2005,81(4):736-746.
- [5] Hillebrand GG,Miyamoto K,Schnell B,et al.Quantitative evaluation of skin condition in an epidemiological survey of females living in northern versus southern Japan[J].J Dermatol Sci,2001,27:S42-52.
- [6] Chung JH,Lee SH,Youn CS,et al.Cutaneous photodamage in Koreans:influence of sex,sun exposure,smoking,and skin color[J]. Arch Dermatol,2001,137(8):1043-1051.
- [7] Beagly J,Gibson IM.Changes in skin condition in relation to degree of exposure to ultraviolet light [M].Perth:School of Biology, Western Australia Institute of Technology,1980:1-45.
- [8] 高倩,汪薇,王阳,等.手背部皮肤纹理老化定量评价指标研究[J].中国美容医学,2007,16(7):941-944.
- [9] Lucas RM,Ponsonby AL,Dear K,et al.Associations between silicone skin cast score,cumulative sun exposure,and other factors in the ausimmune study:a multicenter Australian study[J].Cancer Epidemiol Biomarkers Prev,2009,18(11):2887-2894.
- [10] Battistutta D,Pandeya N,Strutton GM,et al.Skin surface topography grading is a valid measure of skin photoaging[J].Photodermatol Photoimmunol Photomed,2006,22(1):39-45.
- [11] Seddon JM,Egan KM,Zhang Y,et al.Evaluation of skin microtopography as a measure of ultraviolet exposure[J].Invest Ophthalmol Vis Sci,1992,33(6):1903-1908.

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1. 田虎,李吴萍,宋琦如,刘贺荣,汪岭,张鹏举.门诊统筹后农村居民住院情况及影响因素分析[J].中国公共卫生,2013,29(1):103-105
2. 王慧,李海朋,黄水平.苏北农村居民幽门螺杆菌感染及影响因素分析[J].中国公共卫生,2013,29(1):106-108
3. 吴泽慧,黄蓉,田祎,聂绍发.农村居民早期复极综合征影响因素分析[J].中国公共卫生,2013,29(3):357-360
4. 黄芬,周金莉,刘佳琪,万艳平.农村居民器官捐赠知识态度及意愿调查[J].中国公共卫生,2013,29(3):417-419
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6. 许信红,梁晓珊,陈建伟,刘洋,廖枝成,陈晓芳,李丽嫦,刘顺玉,李苙.广州市农村居民健康素养现状及影响因素分析[J].中国公共卫生,2012,28(10):1361-1364
7. 杨丽,徐显娣,刘亚涛,韩晖,崔颖.农村居民高血压知识、行为现状及其影响因素[J].中国公共卫生,2012,28(8):1026-1030
8. 王乐群,张蕃,张桂林,王小玉,田祎,屈克义.宜昌市夷陵区农村居民慢性病患病及影响因素分析[J].中国公共卫生,2012,28(7):898-902
9. 李友卫,王健,汪洋,郭娜,张国杰.济南市农村居民住院服务利用率及费用影响因素[J].中国公共卫生,2012,28(5):606-609
10. 郭振,徐凌忠,孙龙,刘婷婷,赵伟宁,张茜,薛青云,杨爽.山东省农村居民选择村卫生室就医行为分析[J].中国公共卫生,2012,28(5):690-692
11. 张高辉,马吉祥,郭晓雷,陈希,董静,张吉玉,苏军英,唐俊利,徐爱强.农村居民高血压知信行健康教育干预效果评价[J].中国公共卫生,2012,28(5):694-695
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13. 程庆林,胡连鑫,李杰,徐勇.农民突发公共卫生事件应对能力影响因素分析[J].中国公共卫生,2012,28(4):449-450
14. 郭胜利.宁德市1986-2010年农村食物中毒趋势分析[J].中国公共卫生,2012,28(4):568-568
15. 潘雪娇,郑敏,涂秋风,刘玮.江西省农村居民乙肝防治知识调查[J].中国公共卫生,2012,28(3):291-293
16. 毛鸿彦,蔡乐,舒占坤,叶亚怀,冯锐,何建辉,赵科颖,刘国华.云南罗平县农村居民哮喘患病现状及经济负担[J].中国公共卫生,2012,28(2):246-247
17. 唐丹华,胡晓斌,白亚娜,赵迟.农村居民伤害住院患者分布状况趋势分析[J].中国公共卫生,2012,28(1):115-117
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