2010-5

The Utility of Complete Skin Examinations

Erik Domingues

*University of Massachusetts Medical School*

*Et al.*

Let us know how access to this document benefits you.

Follow this and additional works at: [https://escholarship.umassmed.edu/ssp](https://escholarship.umassmed.edu/ssp)

Part of the [Dermatology Commons](https://escholarship.umassmed.edu/dmgt), and the [Life Sciences Commons](https://escholarship.umassmed.edu/lifesci)

Repository Citation


This material is brought to you by eScholarship@UMassChan. It has been accepted for inclusion in Senior Scholars Program by an authorized administrator of eScholarship@UMassChan. For more information, please contact [Lisa.Palmer@umassmed.edu](mailto:Lisa.Palmer@umassmed.edu).
The Utility of Complete Skin Examinations

Erik Domingues MSIV, Dori Goldberg MD, Leah Belazarian MD, Jeffrey Mailhot MD
University of Massachusetts Medical School, Department of Medicine, Division of Dermatology, Worcester, MA
Introduction

• Complete skin exams (CSE’s) are frequently performed by dermatologists
• U.S. Preventive Forces Task Force does not currently recommend routine CSE’s
• Many primary care physicians do not regularly perform CSE’s
Introduction (continued)

• Current literature focuses on benefits of early detection of cutaneous neoplasms

• Multiple barriers to universal use
  – Time constraints
  – Lack of emphasis on CSE’s during training
Goal of CSE’s

• Decrease morbidity, mortality, and costs
• Early detection of malignant melanoma, squamous cell and basal cell carcinoma, and pre-malignancies
• Melanomas are most worrisome and the 5-year survival rate for those with a thickness of < 0.76 mm is 98%
Malignant Melanoma
Squamous Cell Carcinoma
Basal Cell Carcinoma
Actinic keratosis
Dysplastic nevus
Objectives

• Perform CSE’s on all new patients
• Determine number of patients with dermatologist-detected lesions
• Determine number of dermatologist-detected consequential lesions defined as pre-malignant or malignant lesions
Methods

• New patients presenting to UMass Medical Center dermatology clinic from 10/2009 – 3/2010
• Varying ages, ethnicities, and sex
• Patients noted lesions of concern on a survey
Methods

(continued)

• CSE performed on every patient
• Lesions noted by patient documented and treated appropriately
• Dermatologist-detected lesions documented and treated appropriately
## Results

Patients with dermatologist-detected lesions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with lesions</td>
<td>10</td>
</tr>
<tr>
<td>Total Pts enrolled</td>
<td>53</td>
</tr>
<tr>
<td>Percent detected</td>
<td>18.87 %</td>
</tr>
</tbody>
</table>
Patients with dermatologist detected lesions

Total Patients

- Patients with dermatologist detected lesions: 10
- Total Patients: 53
Age Breakdown

- Adult patients: 50
- Children: 3
Gender Breakdown

- Total females: 35
- Total males: 18
<table>
<thead>
<tr>
<th></th>
<th>Females with Detected Lesions</th>
<th>% of Total Females</th>
<th>Males with Detected Lesions</th>
<th>% of Total Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Lesion Detection by Gender</td>
<td>[ ]</td>
<td>[ ]</td>
<td>5</td>
<td>14.29%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>14.29%</td>
<td>5</td>
<td>27.78%</td>
</tr>
</tbody>
</table>
# Dermatologist-detected Consequential Lesions

<table>
<thead>
<tr>
<th>Patients with Consequential Lesions</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients</td>
<td>53</td>
</tr>
<tr>
<td>Percent of Total</td>
<td>9.43%</td>
</tr>
</tbody>
</table>
Consequential Lesions

<table>
<thead>
<tr>
<th>Pre-malignant/malignant Lesions</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lesions Detected</td>
<td>14</td>
</tr>
<tr>
<td>% Consequential of those Detected Detected</td>
<td>57.14%</td>
</tr>
</tbody>
</table>
Number of Patients

- Patients with Consequential Lesions: 5
- Total Patients: 53
### Premalignant Lesions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Premalignant Lesions</td>
<td>6</td>
</tr>
<tr>
<td>% of Total Detected</td>
<td>42.86%</td>
</tr>
<tr>
<td>Clinical Diagnosis</td>
<td>3 (50%)</td>
</tr>
<tr>
<td>Pathologic Diagnosis</td>
<td>3 (50%)</td>
</tr>
<tr>
<td>Malignant Lesions</td>
<td>2</td>
</tr>
<tr>
<td>-------------------</td>
<td>---</td>
</tr>
<tr>
<td>% of Total Detected</td>
<td>14.29%</td>
</tr>
<tr>
<td>Clinical Diagnosis</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Pathologic Diagnosis</td>
<td>2 (100%)</td>
</tr>
<tr>
<td>Condition</td>
<td>Count</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Malignant Melanoma</td>
<td>0</td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>0</td>
</tr>
<tr>
<td>Basal Cell Carcinoma</td>
<td>2</td>
</tr>
<tr>
<td>Actinic Keratosis</td>
<td>4</td>
</tr>
<tr>
<td>Dysplastic Nevus</td>
<td>2</td>
</tr>
</tbody>
</table>
Consequential lesion

- Malignant melanoma
- Squamous cell carcinoma
- Basal carcinoma
- Actinic keratosis
- Dysplastic nevus

Bar chart showing:
- Malignant melanoma: 4
- Squamous cell carcinoma: 2
- Basal carcinoma: 2
- Actinic keratosis: 0
- Dysplastic nevus: 0
Discussion

• Focus on consequential premalignant & malignant lesions
• Goal to decrease morbidity & mortality
• One patient worked up for possible neurofibromatosis
• No statistical significance with detection of lesions based on gender
• Presence of limitations
Limitations

• Small patient population surveyed
• Surveys not used in all clinics
• Small number of children included
• Twice as many females as males
• No breakdown based on Fitzpatrick skin type
Conclusion

• Pilot study
• CSE detected consequential lesions in 9.4% of population surveyed
• Clinically significant results
• No statistical significance secondary to small population size
• Future large-scale study will include more children and adults of all ages, ethnicities, and gender
References


Acknowledgements

• Thank you to the University of Massachusetts Division of Dermatology for their help and support

• Thank you to Judy Savageau for her assistance with the statistics calculations