5-2010

The Utility of Complete Skin Examinations

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**Repository Citation**

Domingues, Erik; Goldberg, Dori; Belazarian, Leah; and Mailhot, Jeffrey D., "The Utility of Complete Skin Examinations" (2010). University of Massachusetts Medical School. Senior Scholars Program. Paper 107.

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Comments
Medical student Erik Domingues participated in this study as part of the Senior Scholars research program.

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The Utility of Complete Skin Examinations

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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 carcinomas, 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

53

10

Patients with dermatologist detected lesions

Total Patients
Age Breakdown

- Adult patients (50)
- Children (3)
Gender Breakdown

- Total females: 35
- Total males: 18
# Lesion Detection by Gender

<table>
<thead>
<tr>
<th>Females with Detected Lesions</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Total Females</td>
<td>14.29%</td>
</tr>
<tr>
<td>Males with Detected Lesions</td>
<td>5</td>
</tr>
<tr>
<td>% of Total Males</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

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

Patients with Consequential Lesions
Total Patients

- 5
- 53
### Premalignant Lesions

<table>
<thead>
<tr>
<th>Premalignant Lesions</th>
<th>6</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>
### Malignant Lesions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malignant Lesions</strong></td>
<td>2</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

<table>
<thead>
<tr>
<th>Consequential lesion</th>
<th>Malignant melanoma</th>
<th>Squamous cell carcinoma</th>
<th>Basal carcinoma</th>
<th>Actinic keratosis</th>
<th>Dysplastic nevus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

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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