Parent and Child Adjustment to Pediatric Burn Injuries

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Disclosures

- none
• Quality of life (QOL)
  – Emotional functioning, pain, daily activities, hobbies/sports, school and social functioning

• Burn injuries can lead to poorer QOL outcomes in children, but outcomes vary

Landoldt, et al., 2009
WHAT PREDICTS QOL OUTCOMES IN CHILDREN?
Parent outcomes of child burn injuries

• Burns in children are among the most stressful medical events for a parent
• Parents at risk for developing symptoms of PTSD and depression
Parent Symptoms

• Parent PTSD and depressive symptoms
  – significantly associated and predictive of child PTSD

  Morris, Gabert-Quillen, Delahanty, 2013

• Same pattern has been found with pediatric burn injuries

  Hall et al., 2006
DOES THIS APPLY TO CHILD QOL FOLLOWING BURN INJURY?
Current Study

• Retrospective chart review
  – September 2014 to September 2015
• Children and parents routinely seen/screened by a pediatric psychologist as part of multidisciplinary outpatient clinic
  – Time 1 approx~1 week post-injury
  – Time 2 approx~1 month later
Measures

- Children’s/Infant Dermatology Life Quality Index (CDLQI)
  - 0-3 infant version & 4-18 child version
  - Time 1:
    - M=7.05, moderate impairment
    - Range: 0-30
  - Time 2:
    - M=5.93, mild-moderate impairment
    - Range: 0-23
  - Higher scores = poorer QOL
Measures

• Short PTSD Rating Interview (SPRINT)
  – Sum score of hyperarousal, avoidance/numbing, and re-experiencing symptoms of PTSD
  – Time 1:
    • M=6.94, moderate
    • Range=0-32
  – Time 2:
    • M=4.76, mild
    • Range=0-21
Measures

- Chosen to capture clinical need
- Brief
- Well validated
- Child measure does not exclusively focused on psychopathology
  - Most children do not develop PTSD
# Participants/Demographics

## Older QOL, Ages 4-18
- **Age**
  - $M=8.85$, $SD=3.44$
- **Gender**
  - 50.1% Male
- **Race/Ethnicity**
  - 41% Black
  - 37.8% White

## Younger QOL, Ages 0-3
- **Age**
  - $M=1.6$, $SD=.83$
- **Gender**
  - 61.1% Male
- **Race/Ethnicity**
  - 42% Black
  - 32% White
## Results

### Time 1 Initial assessment (~1 week)

<table>
<thead>
<tr>
<th>Older version (n=71)</th>
<th>Younger version (n=65)</th>
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</thead>
<tbody>
<tr>
<td>QOL/Parent Sx</td>
<td>QOL/Parent Sx</td>
</tr>
<tr>
<td>• $r = .41, p &lt; .0001$</td>
<td>• $r = .50, p &lt; .0001$</td>
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<tr>
<td>Parent sx significantly assoc with child QOL scores when controlling for child age and gender</td>
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<td>• $\beta = .30, p &lt; .01$</td>
<td>• $\beta = .49, p &lt; .01$</td>
</tr>
</tbody>
</table>
Results

Time 2 follow-up (~1 month)

Older version (n=29)
- QOL/Parent Sx
  - $r = .59$, $p < .001$
- QOL/Parent sx significantly assoc controlling for child age and gender
  - $\beta = .46$, $p < .01$

Younger version (n=18)
- QOL/Parent Sx
  - $r = .51$, $p < .05$
- QOL/Parent sx significantly assoc controlling for child age and gender
  - $\beta = .43$, $p = .12$
Longitudinal Analyses

- Parent sx at T1 significantly predicted poorer QOL at T2, controlling for QOL at T1
- Effect of Time 1 QOL on Time 2 QOL disappears
- Older version
  - $\beta = .54$, $p < .001$
- Younger version
  - $\beta = .54$, $p < .01$
Discussion

• Parent symptoms predict child QOL impairment
• Child QOL AND parent symptoms should be routinely assessed following a burn injury
• Screeners are brief, feasible, clinically relevant and appreciated!
Limitations

• Limited to outpatient burn population
  – Possible limited generalizability
• Small sample size
• Did not include injury characteristics
• Unclear how psychological functioning associated with wound care/adherence
Future Directions

• Combine with burn registry
• Examine mediating and moderating influences
• Injury characteristics
  – TBSA
  – Burn severity
  – Location of burn
• Time elapsed since injury