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Quality of Life and Burden of Care in Patients with Early Onset Scoliosis Undergoing Casting

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Disclosures

- Emily Auran, BA: None
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Background and Purpose

Background

 Mehta casting serves as a safer alternative to surgical intervention in the treatment of EOS

Previous Work

 ICEOS 2013 – Previously presented HRQoL and burden of care during in-cast period, but follow-up data after casting was NOT available

Purpose

 To describe the changes in HRQoL of patients with EOS and the burden of their caregivers prior to, during and after serial casting

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Methods

Procedures

- CSSG registry identified:
 - -25 non-idiopathic
 - -34 idiopathic

Outcome Measure

- EOSQ-24 A valid, reliable, and responsive instrument
- Administered to caregivers:
 - -Prior to (average 2 weeks before casting)
 - —During (average 9 months after initial casting)
 - -After (average 7 months after cast removal)



Both non-idiopathic and idiopathic experienced curve correction





Idiopathic: <u>Pre-cast</u> EOSQ scores were mostly equivalent to age-matched norms



Non-idiopathic: <u>Pre-cast</u>EOSQ scores were significantly lower than age-matched norms



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Idiopathic: EOSQ declined significantly in <u>4</u> domains <u>while in-cast</u>



Non-Idiopathic: EOSQ declined significantly in only <u>2</u> domains <u>while in-cast</u>



Non-Idiopathic returned to baseline HRQoL after casting while idiopathic remains static



Limitations

- It is not possible to discern from this study whether low HRQoL and high Parental Burden during the casting is related to:
 - Repeated OR/anesthesia procedures vs
 - Having the body in a cast

Longer follow-up is also needed





Discussion

- EOS patients undergoing casting experience significantly lower HRQoL and higher parental burden compared to norms
 - Need to compare with surgical patients
- Serial casting is not "free"
 - Especially in idiopathic patients who are relatively healthy initially





Thank you!



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