Pressure garment therapy in children across the ages: less is more

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How do we make good clinical decisions?
Evidence Based Medicine

Image taken from James M Anderson Centre for Health Systems Excellence:
https://www.healthcatalyst.com/5-reasons-practice-evidence-based-medicine-is-hot-topic
BRIS Trial RCT Findings

Results from 6 month data:

• Mean TBSA: 1.0%

• There is no benefit to using combined interventions (i.e. Topical silicone gel and pressure garment therapy) in reducing scar thickness

• Combined interventions resulted in reduced adherence and satisfaction with treatment although more adverse effects were identified in the pressure garment group than silicone group.

METHOD:

We completed an observational study design, and retrospectively audited prospectively collected data of expenditure for pressure garments and occasions of service using local databases.
Pressure Garment Expenditure

Cost (AUD$10,000)

Month

Jan 2016: 70
Feb 2016: 30
Mar 2016: 50
Apr 2016: 60
May 2016: 50
June 2016: 10
Total 2016: 220

Jan 2019: 20
Feb 2019: 20
Mar 2019: 10
Apr 2019: 20
May 2019: 60
June 2019: 20
Total 2019: 170
## Pressure Garment Expenditure

<table>
<thead>
<tr>
<th></th>
<th>2016 Occasions Of Service</th>
<th>2019 Occasions Of Service</th>
<th>Cost/ month</th>
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<tbody>
<tr>
<td></td>
<td>Jan</td>
<td>Feb</td>
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<td>2016</td>
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<td>277</td>
<td>338</td>
<td>350</td>
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<td>2019</td>
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**2016**

- **Jan**: 277 occasions, $18,425 cost/month
- **Feb**: 338 occasions, $9,840 cost/month
- **Mar**: 350 occasions, $16,545 cost/month
- **Apr**: 318 occasions, $16,235 cost/month
- **May**: 316 occasions, $14,428 cost/month
- **June**: 354 occasions, $2,652 cost/month
- **Total**: 1953 occasions, $78,127 cost

**2019**

- **Jan**: 382 occasions, $8,875 cost/month
- **Feb**: 344 occasions, $4,255 cost/month
- **Mar**: 316 occasions, $2,256 cost/month
- **Apr**: 368 occasions, $5,338 cost/month
- **May**: 379 occasions, $10,804 cost/month
- **June**: 372 occasions, $7,743 cost/month
- **Total**: 2161 occasions, $39,273 cost
Has the RCT changed practice?

Cost Reduction

2016 (Jan – June)
- Total PG expenditure
- $78,127.76

2019 (Jan – June)
- Total PG Expenditure
- $39,273.90
When do we apply compression?
Where to from here?

1. Have the demographics of the children we are treating changed
2. Do different parts of the body respond differently to compression
3. How significantly does adherence impact on clinical outcomes
4. Should combined interventions be used upon family request
5. Would combined interventions beneficial in certain parts of the body

Family Centered Care