

RO&Ming with Lil Episode 13

Toddling with CVI - Luka, Heidi and Bronwen



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Introduction to Episode 13

- Welcome to Heidi Zec and Bronwen Scott!
- At two weeks old, Heidi's son Luka contracted a virus that landed him in NICU – the neonatal intensive care unit
 - In NICU for 14 days
 - Virus resulted in brain damage
 - Luka screened for hearing, and for cerebral palsy markers
- 6 months later...
 - Heidi concerned about strange eye movements seizures?
 - Luka vaguing out
 - Diagnosis of CVI

What is CVI?

Not an eye problem, but a visual processing problem in the brain

Cortical visual impairment AND/OR **Cerebral** visual impairment

What's the difference?

Brain damage can happen:

- between the optic chiasm and the occipital lobe where primary visual processing happens and/or
- post-occipital lobe, in many areas of the brain where vision is interpreted (recognising, naming, responding to...)

CVI Range

- Functional vision assessment
 - Accessible, easy to use, easy to understand
- Developed by Dr Christine Roman-Lantzy
 - O&M specialist
 - Educator
 - PhD study specialised in fragile babies and functional outcomes
- Measures 10 functional characteristics of CVI
 - Scored out of 10
 - Score indicates one of 3 phases of vision development with CVI
 - Appropriate intervention (depends on phase) helps to develop visual pathways and synapses
- Build vision and prevent avoidable blindness!

Team Luka

- Early intervention
 - Neural plasticity in first 2 years
 - Short amount of time to change and regrow a brain
- Occupational Therapist – initially weekly
- Physiotherapist – initially weekly
- O&M Specialist
- Orthoptist
- Speech Therapist
- Music Therapist

Cerebral visual impairment

- Dr Gordon Dutton – Scotland
- Dorsal and ventral pathways for visual interpretation
- Understand brain function and vision
- Explore complexities in CVI

CVI Community Australia

- Connect with other families
- Connect with professionals
- Share learning, contacts, strategies, support

<https://www.cvicommunityaus.net/>

Want to learn more?

Perkins CVI Hub: <https://www.perkinselearning.org/cvi>

Cortical v cerebral visual impairment:

<https://www.perkins.org/assets/downloads/webinars/cvi-webinar-session-1.pdf>

Christine Roman-Lantzy. (2018). *Cortical visual impairment: An approach to assessment and intervention, 2nd Edition*. AFB Press. (CVI Range assessment tool)

Amanda Hall Lueck & Gordon N. Dutton (Eds). (2015). *Vision and the brain: Understanding cerebral visual impairment in children*. American Printing House for the Blind.

Josef Zihl & Gordon Dutton (2016). *Cerebral visual impairment in children: Visuoperceptive and visuocognitive disorders*. Springer.

Thanks Bronwen, Heidi and of course, Luka



Contacts / Resources

- Links and PowerPoint slides for *RO&Ming with Lil*

www.lildeverell.net/resources/roaming-with-lil/

- To discuss VROOM and OMO, offer feedback, suggest a topic, or record an episode together:

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Credits

- Music
 - *Happy Stroll*, a royalty-free download from Purple Planet Music
- Graphics created by Lil Deverell with
 - PhotoShop lessons and technotherapy from Erin Deverell
 - Photos from
 - An amateur drone photographer from Cornwall, flying over a spaghetti junction in Birmingham (royalty-free)
 - Christine Darwood, a wildlife spotter in the ACT who snapped our sprightly echidna crossing the road (used with permission)
 - Rob Keating, a Canberra-based photographer, who found a weathered wombat crossing the road (purchased from <https://keatingmedia.com.au>)

