Stress, anxiety, and depression in care-givers of children with chromosome 22q11.2 deletion syndrome

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Kids with 22qDS and their families have a lot to cope with!

• ongoing health and development issues

• Socioemotional impairments

• Cognitive impairments that complicate education

• Co-morbid for other Dx (ADHD, OCD)

• Problems become more prominent with increasing social and academic demands.
Stress and Chromosome 22q11.2DS

Stress and allostatic load in 22qDS likely results from a multivariate and reciprocal interaction of:

– Atypical brain development
– Early traumatic experiences
– Medical, behavioral, cognitive, and socioemotional challenges associated with the syndrome borne by the children and their families
– Genetically derived temperament, coping capacity, and resilience

Elevated anxiety in 22q11.2DS vs. TD kids
Elevated depression in 22q11.2DS vs. TD kids

Anxiety has measurable and important behavioral implications for kids with 22q11.2DS.
Separation anxiety does not abate in 22q

Beaton et al. (ongoing study)

Understanding the child’s ecology…

- Socioeconomics
- School environment and community supports
- Environmental health
- Community factors (safety and crime, access to health care, social support, urbanization)
- Cultural factors, language, and racism
- Parental stress and mental health
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Maternal Depression (BDI)

Beaton et al. (ongoing study)
Maternal Quality-of-Life Scale

Maternal Quality of Life (QOL)

Negative and Positive Life Events Over the Past Year

Beaton et al. (ongoing study)
Multidimensional Anxiety Scale for Children

Physical Symptoms
Tense/Restless
Somatic/Autonomic
Harm Avoidance
Perfectionism
Anxious Coping
Social Anxiety
Humiliation/Rejection
Performance Fears
Separation/Panic
Anxiety Disorder Index
MASC Total

MASC t-scores
Ss 001
22q (n = 51 no Ss 001)
TD (n = 41)
Children’s Depression Scale

![Bar chart showing CDI scores for different groups]

- Total CDI
- Negative Mood
- Interpersonal Problems
- Ineffectiveness
- Anhedonia
- Negative Self-Esteem

Ss 001 22q (n = 47) TD (n = 39)
SUMMARY – The Child’s Ecology

• As a group, children with 22q11.2DS report greater levels of anxiety and depression vs. TD

• Parental stress, anxiety, and depression is variable and should be addressed to improve QOL for parents but also but may affect child health

• A family- and community- focused perspective (eg. parental mental health) needs to be added

Elliott Beaton is joining the Department of Psychology faculty at the University of New Orleans

We will be continuing our research on stress, development and health in children with 22q11.2DS at the MIND Institute and at the:

Stress, Cognition, and Affective Neuroscience (SCAN) Laboratory

http://psyc.uno.edu/
Thank you.

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