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| **Screening for mood and behavioural changes in children aged 6-12 years with Cystic Fibrosis following commencement of Elexacaftor/Tezacaftor/Ivacaftor (ETI).** |
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| **Introduction/Aim:** People with Cystic Fibrosis (CF) have higher rates of mental health issues than the general community. As such, annual mental health screening has become international standard of care for those aged 12 years and older. Following the rollout of elexacaftor/tezacaftor/ivacaftor (ETI) in adults and adolescents, multiple case reports and case series described patients experiencing new or worsened anxiety, depression, brain fog and suicidality. With commencement of ETI treatment in the 6-11 year age group, there are concerns similar adverse effects may be experienced. To identify children experiencing psychological or neurocognitive symptoms that may relate to ETI; a quantitative, standardised assessment at baseline and on treatment was performed.    **Methods:** Parents/carers of Sydney Children’s Hospital (SCH) CF patients aged 6-12 years completed the Child Behaviour Checklist (CBCL) at baseline (commencement of ETI) and repeated after three months of treatment. The CBCL provides comprehensive, empiric assessment of behavioural and emotional problems and adaptive skills. This provided data comparing participants to age, gender and ethnicity matched norms, with changes tracked over time. Changes between timepoints were analysed for: (1) the total cohort, (2) those modulator-naïve versus previous modulator therapy, and (3) pre-existing neurocognitive or psychological diagnoses and those without.  **Results:** Preliminary results from this pilot study are available for 20 baseline questionnaires and 11 participants at both timepoints. At baseline 7/20 participants had scores in ‘clinical’ range (T score >70) and an additional 4/20 had scores in ‘borderline’ range. 2/11 participants had clinically significant increase in CBCL scores on treatment from ‘normal’ to ‘clinical’ range. 2/11 participants had normalisation of scores. Two participants required alterations to ETI prescription (through dose or timing adjustment).  **Conclusions:** Over one third of children with CF aged 6-11 years have abnormal CBCL scores at baseline. The CBCL detected emotional and behavioural changes in children after commencement of ETI.  **Grant Support:** SCH Respiratory Research Grant. |