

# POINTS TO REMEMBER FOR CLINICAL PRACTICE

## Sleep-Disordered Breathing in Patients

- Less frequent than Obstructive Sleep Apnea Syndrome (OSAS), other sleep-disordered breathing is more frequent in patients with trisomy 21 than in the neurotypical population.
- The frequency of Central Sleep Apnea (CSA) with a Central Apnea Index (CAI)  $>2/h$  is 12% in children with trisomy 21; 'very significant, CAI  $>10/h$ ' forms are nevertheless ten times rarer (1.2%).
- CSA gradually becomes less prevalent with age: very frequent in children aged  $\leq 2$  years (19%) and rare after the age of 10 years (3%).
- There is a very strong association of CSA with obstructive apnea; adenotonsillectomy significantly reduces the CAI.
- The assessment of significant or very significant CAS should involve looking for an Arnold-Chiari deformation by a cervical MRI.
- The high prevalence of nocturnal alveolar hypoventilation in children with trisomy 21 (14-32%) is independent of the presence of moderate or severe OSAS.
- The presence of significant nocturnal alveolar hypoventilation, regardless of whether it is accompanied by OSAS, is the indication for non-invasive ventilation.
- Significant nocturnal hypoxemia is frequent in patients with trisomy 21 and is correlated with the presence of pulmonary arterial hypertension.