

CLINICAL UPDATE: MIST+ trial confirms nasal saline as an effective first-line option for symptoms of childhood OSDB¹

Obstructive sleep-disordered breathing (OSDB) symptoms affect up to 12% of children¹



Linked to daytime sleepiness and increased risk for depression, loneliness, and poor school performance^{1,2}



Adenotonsillectomy improves sleep symptoms and QoL, but carries cost, risk of adverse effects and lengthy wait times¹



As nasal resistance contributes to OSDB, intranasal therapy can play a key role in early management^{1,3}

The MIST+ trial investigated intranasal therapy for resolving OSDB symptoms¹

Design	Multicentre, double-blind, placebo-controlled, randomised clinical trial across 2 Australian tertiary paediatric hospitals
Population	Children aged 3–12 years with OSDB (n=150) recruited between December 2022 and June 2024 (study data analysed from January to June 2025)
Objective	To determine the efficacy of 6 weeks of intranasal steroid (INS)* compared with nasal saline in children with OSDB experiencing persistent symptoms after an initial 6-week run-in of nasal saline
Randomisation	Following the 6-week run-in with once-daily saline, children with persistent symptoms were randomised to either continued nasal saline or once-daily INS for a further 6 weeks
Primary outcome	Symptom resolution (SDB ⁺ score < -1)

Results support nasal saline as a low-risk, primary care-led intervention that may help reduce demand for steroids and surgery¹



After only 6 weeks,

29.5%

of children improved with nasal saline alone¹



Of those with persistent symptoms,

36.4%

who continued with nasal saline improved by 12 weeks¹



No added benefit found from INS

over nasal saline in the randomised phase¹

KEY PRACTICE POINT: Authors recommend a 3-month trial of nasal saline as first-line treatment before assessing the need for specialist referral¹



Read the full MIST+ clinical trial
(subscription required)



Read Monash Health's news update
on the MIST+ clinical trial

INS, intranasal steroid; OSDB, obstructive sleep-disordered breathing; QoL, quality of life; SDB, sleep-disordered breathing.

*Mometasone furoate 50 µg.¹

¹Sleep-Disordered Breathing score – a parent-reported composite measure derived from the Brouillette et al. questionnaire that quantifies snoring and nighttime breathing difficulties, with scores < -1 indicating resolution of symptoms.⁴

[†]In the MIST+ clinical trial, there was no difference between INS and saline in the randomised phase (35.6% vs 36.4% respectively; risk difference -0.9%, 95% confidence interval 20.7–19.0; P=0.93).¹



For paediatric nasal congestion associated with OSDB



Nasal congestion resulting from mucosal inflammation may contribute to OSDB, and often causes mouth breathing in children.⁵



Nasal saline is a gentle, non-medicated treatment option for reducing nasal congestion, that has been shown to be **equally effective as INS** in resolving symptoms of OSDB.^{1,6}

FESS offers age-specific nasal saline sprays to deliver the right volume of nasal saline for children's developing sinonasal anatomy

	Healthy Sleep Partner of SleepHealth FOUNDATION	FESS Children's	FESS Original
Bottle size		20 mL	30 mL
Volume per actuation		100 µL	140 µL
Sprays per bottle		200	214
			

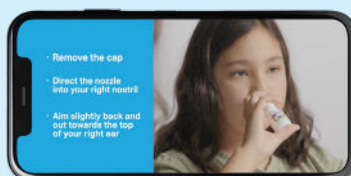
Access a range of free FESS resources on Care Connect
Scan the QR code or visit hcp.carepharma.com.au/register



FREE Samples
delivered directly to
your practice



How-To Videos
to demonstrate correct
technique to patients



HealtheD Product Explainer
discussing the use of nasal saline
with Dr Jessica Tattersall



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References: 1. Nixon GM, et al. *JAMA Pediatr.* Published online January 20, 2026. 2. Liu J, et al. *Psychiatry Res.* 2016;242:218-225. 3. Tapia IE, et al. *Sleep.* 2016;39(4):793-9. 4. Baker A, et al. *JAMA Pediatr.* 2023 Mar 1;177(3):240-247. 5. Magliulo G, et al. *Acta Otorhinolaryngol Ital.* 2019;39(4):250-256. 6. Santoro E, et al. *Rhinology Online.* 2021;4:1-16.

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