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SUPPLEMENTAL DATA

Increased carotid intima-media thickness in pediatric nephrotic syndrome: A meta-analysis

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Full article is available at the following link: Increased carotid intima-media thickness in pediatric nephrotic syndrome: A meta-analysis

Supplemental file 1.

Detailed search strategy for each database

PubMed

("carotid intima-media thickness"[Mesh] OR "carotid intima media thickness" OR "carotid intima-media thickness" OR CIMT) AND ("nephrotic syndrome"[Mesh] OR "nephrotic syndrome" OR nephrosis) AND ("child"[Mesh] OR child* OR children OR pediatric* OR paediatric* OR adolescent)

Embase

('carotid intima media thickness'/exp OR 'carotid intima-media thickness' OR 'CIMT') AND ('nephrotic syndrome'/exp OR 'nephrotic syndrome' OR nephrosis) AND ('child'/exp OR child* OR children OR pediatric* OR paediatric* OR adolescent*)

Web of Science

TS=("carotid intima media thickness" OR "carotid intima-media thickness" OR CIMT) AND TS=("nephrotic syndrome" OR nephrosis) AND TS=(child* OR children OR pediatric* OR paediatric* OR adolescent*)

Supplemental table 1. Details of cIMT measurement

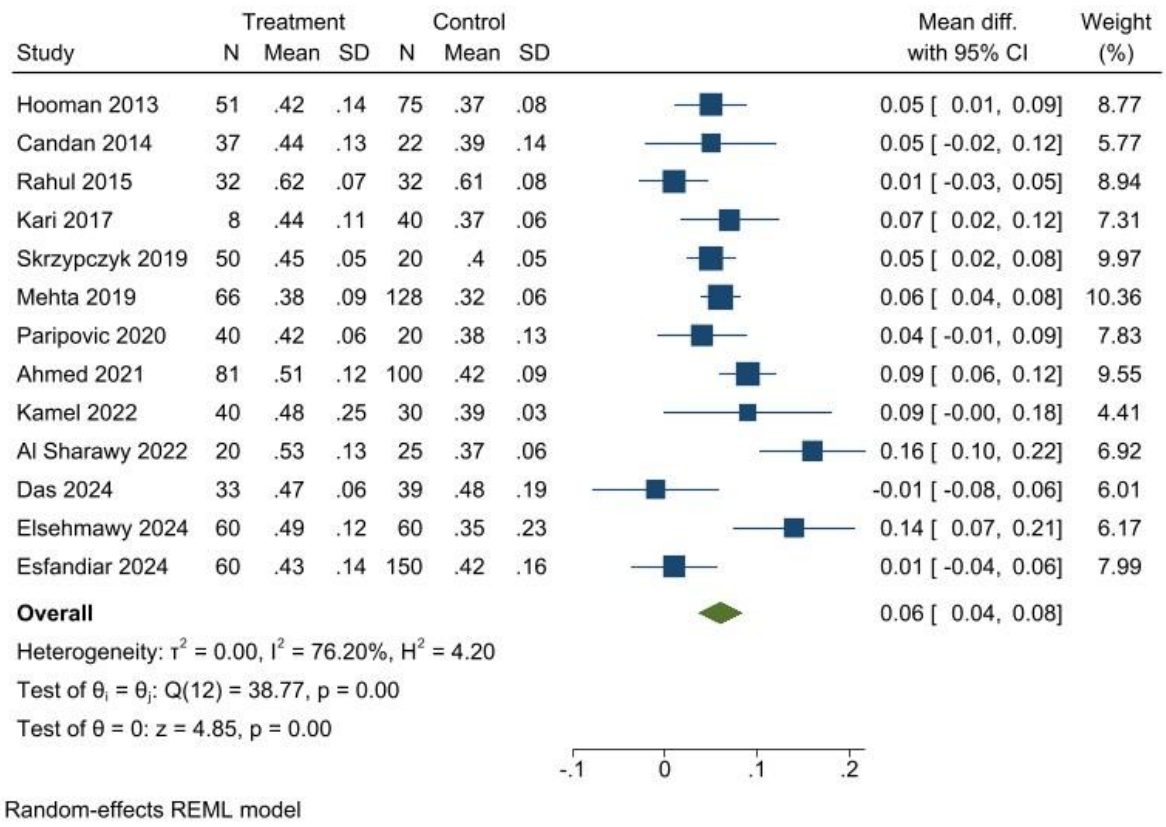
Study	Probe frequency	Duration of children rest before measurement	Far- wall or mean- wall values were averaged
Hooman 2013	Two probes: 7.5 MHz linear and 5 MHz convex	10 minutes	The far wall of the common carotid artery was measured. Two measurements were made on each side (left and right), and the mean value was calculated separately for each common carotid artery
Candan 2014	A 5- to 7.5-MHz linear array transducer	15 minutes	The far wall of the common carotid artery was measured. Three to five measurements were manually obtained on both

			the left and right carotid arteries. These measurements were then averaged for each patient. The measurement was taken 1–2 cm proximal to the carotid bifurcation.
Rahul 2015	A 9 MHz linear array transducer	NR	The far wall of the common carotid artery was measured. The intima-media thickness was measured at three sites bilaterally (on both the left and right carotid arteries). These measurements were then averaged to obtain the mean cIMT for each patient.
Kari 2017	A 12 MHz linear array transducer	NR	The far wall of the common carotid artery was measured. The measurement was taken 1 cm proximal to the carotid bifurcation. An automated edge detection system was used on 2 separate images of the right and left common carotid arteries.
Skrzypczyk 2019	A 13 MHz linear array transducer	NR	The far wall of the common carotid artery was measured. The measurement was taken ~1 cm proximal to the carotid bulb. Six determinations of cIMT were obtained: three on the left and three on the right side.
Mehta 2019	A 7.5-MHz linear array transducer	10 minutes	The far wall of the common carotid artery was measured. The measurement was taken 10–20

			mm proximal to the carotid bifurcation. Measurements were obtained from both the left and right common carotid arteries. The mean of the left and right common carotid artery measurements was used in the study
Paripovic 2020	NR	NR	The far wall of the common carotid artery was measured. The measurement was taken 1 cm proximal to the carotid bifurcation. Six measurements were taken on each side (left and right). The mean value of these six measurements per side was used for further analysis.
Ahmed 2021	A 7.5-MHz linear array transducer	10 minutes	Measurements were obtained from the far wall of the left and right common carotid artery. Mean values were used.
Kamel 2022	A 7.5-MHz linear array transducer	10 minutes	The far wall of the common carotid artery was measured. Three separate measurements were taken for each carotid artery (left and right), and an average was calculated.
Al Sharawy 2022	A multi-frequency linear probe (5–10 MHz)	NR	Measurements were taken from the far wall of the carotid artery. The mean of six recordings (three on each side) was calculated.
Das 2024	NR	NR	Measurements were obtained

			from the far wall of the carotid artery. Measurements were taken from three segments (distal common carotid, carotid bulb, and proximal internal carotid) of both sides. The mean of the left and right common carotid arteries was used, and these were further averaged to give an overall mean IMT.
Elsehmawy 2024	A 7.5-MHz linear array transducer	10 minutes	Measurements were taken from the far wall of the common carotid artery. Measurements were taken three times on each side (left and right common carotid arteries). The average of these measurements was calculated for each side. Finally, the mean of the measurements from the left and right arteries was used as the final value.
Esfandiar 2024	A 7.5-MHz linear array transducer	10 minutes	The study does not explicitly state whether far-wall or mean-wall values were averaged. However, it mentions that the thickness of the carotid artery was measured on both sides (right and left), and the average of these measurements were used.

Abbreviations: cIMT: Carotid intima-media thickness; NR: Not reported.



Supplemental figure 1. Sensitivity analysis using the REML approach. The pooled analysis of 13 studies confirmed that children with NS had significantly higher cIMT compared to controls (MD: 0.06 mm; 95% CI: 0.04–0.08; $p < 0.001$; $I^2 = 76\%$), consistent with the main results and indicating robustness of the findings.

Abbreviations: NS: Nephrotic syndrome; cIMT: Carotid intima–media thickness; MD: Mean difference; CI: Confidence interval; REML: Restricted maximum likelihood.