neonates undergoing palliative surgery (p = 0.0003) and complete repair (p = 0.000001).

PO-0025 WITHDRAWN

PO-0026 ECHOCARDIOGRAPHIC ASSESSMENT OF CORONARY ARTERIES USING HIGH RESOLUTION TRANSTHORACIC ECHOCARDIOGRAPHY IN PATIENTS WITH A PREVIOUS DIAGNOSIS OF KAWASAKI DISEASE

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10.1136/archdischild-2014-307384.704

Background and aim Kawasaki disease (KD) is a generalised systemic vasculitis of unknown aetiology involving medium and small size blood vessels, particularly the coronary arteries, in which a progressive stenosis may result from active remodelling with an intimal proliferation and neoangiogenesis. The aim of our study was to assess if subjects with a previous diagnosis of KD show, after several years, a coronary intimal thickening, suggestive of a persistent cardiovascular risk, by using high-resolution transthoracic echocardiography (HRTE).

Methods We conducted an observational cross-sectional case-control double-blind study on 21 patients with a previous diagnosis of KD who had been hospitalised, as children, since January 1990 to December 1999 in our Paediatric Department of the University of Catania, Italy. We performed colordoppler-echocardiography in all patients assessing measurement of thickening, inner diameter and outer diameter of proximal portion of left coronary artery using HRTE.

The cardiologic data were compared with those of the 21 healthy subjects of the same age.

Results We found a significant intimal thickening in patients with previous KD compared to healthy controls (3.9 mm ± 2.4 mm vs 1.8 mm ± 0.6 mm $p < 0.05$). In particular, we noticed that also subjects not suffering from coronary impairment in acute phase have higher values of thickening than healthy controls, configuring a higher cardiovascular risk.

Conclusions We concluded that the assessment of coronary artery thickening by means of HRTE may become an essential instrument to evaluate late cardiovascular risk in subjects with a diagnosis of KD in childhood.

PO-0027 INTERSTITIAL FLUID COLLOID OSMOTIC PRESSURE IN HEALTHY CHILDREN

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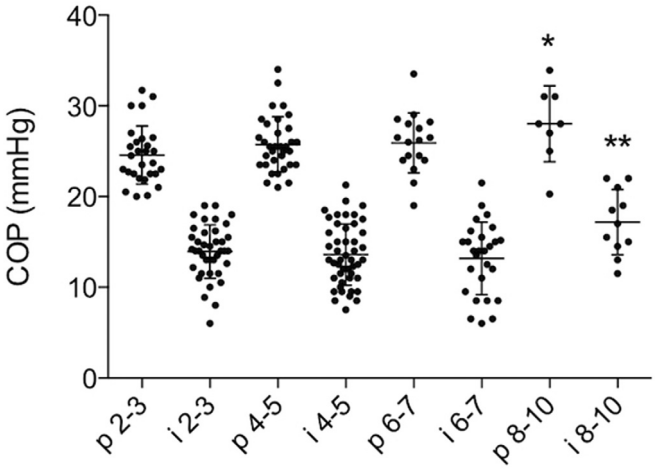
10.1136/archdischild-2014-307384.705

Background and aims Colloid osmotic pressure (COP) of plasma and interstitial fluid play important roles in transvascular fluid exchange were small pressure alterations may result in fluid shifts into or out of the capillaries optimising homeostasis. This study was conducted to determine reference values of COP in healthy children, and to evaluate the methodology of harvesting interstitial fluid.

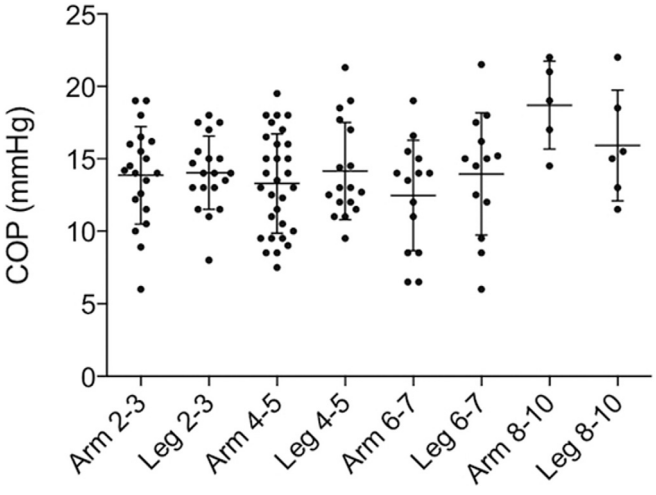


Abstract PO-0027 Figure 1 Colloid osmotic pressure in plasma and interstitium. Colloid osmotic pressure in plasma (p) and interstitium (i) (arm and leg merged) related to age. There was significant difference in pressure beween 2–3 years and 8–10 years for plasma ($p < 0.05$, *) and between first three age groups and 8–10 years ($p < 0.01$, **) in interstitial fluid

Methods COP in plasma and interstitial fluid isolated from nylon wicks implanted subcutaneously was measured in 99 healthy children from 2 to 10 years of age. Patients were sedated and intubated during wick implantation in arm and leg, and COP was analysed in a colloid osmometer.

Results Mean plasma COP in all children was 25.6 ± 3.3 mmHg. Arbitrary division of children in age groups, showed no significant difference in plasma or interstitial fluid COP values for patients less than 8 years, whereas patients of 8–10 years had significant higher COP both in plasma and interstitial fluid. There was no gender difference or correlation between COP in interstitial fluid sampled from arm and leg and no significant effect on interstitial COP of gravity. Prolonged implantation time did not affect interstitial COP.

Conclusions This study justifies the presumption that plasma and interstitial COP in healthy children are similar to adults.



Abstract PO-0027 Figure 2 Colloid osmotic pressure in arm and leg. Colloid osmotic pressure from wicks after implantation in arm vs. leg related to age. There was no significant difference in the pressures obtained in arm and leg

Arch Dis Child: first published as 10.1136/archdischild-2014-307384.704 on 14 October 2014. Downloaded from http://adc.bmj.com/ on June 23, 2024 by guest. Protected by copyright.