

is no correlation between the mutation type and the phenotype severity.

Aneurysms-Osteoarthritis syndrome (AOS), genotype-phenotype correlation, heritable thoracic aortic aneurysms and dissections (hTAAD), Loeys-Dietz syndrome, SMAD3, Marfan-like connective tissue disorder, TGF β pathway.

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P5

Surgical closure of the patent ductus arteriosus by anterior mini-thoracotomy in very preterm infants



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Introduction Patent ductus arteriosus (PDA) is an important cause of morbi-mortality in preterm newborns.

Purpose Our study aimed to analyze efficacy and safety of surgical closure of PDA using anterior mini-thoracotomy in very low weight preterm babies.

Materials and methods Monocentric and retrospective study including 21 preterms < 1.3 kgs, who underwent surgical closure of PDA through anterior mini-thoracotomy, between 2010 and 2016.

Results Mean gestational age (GA) at birth was 25.9 ± 1.2 weeks, mean weight at birth was 734 ± 133 gr. Mean age at the time of surgery was 25.4 ± 9.6 days. Mean corrected age and weight at surgery were 29.6 ± 1.6 weeks of GA and 1058 ± 166 gr respectively. 90.5% of neonates had at least one trial of ibuprofen before surgery. 18 patients (85.7%) were ventilated before surgery. Median follow-up was 68.5 days [11 to 273 days] after surgery. No death related to surgery occurred. 3 patients died 49, 65 and 204 days after surgery, due to sepsis, not considered related to surgery. Immediate post-operative echocardiography showed non significant residual shunt in only 1 patient (4.8%), and complete closure in the 20 remaining babies. Median time to extubation was 6 [3–16] days. One patient (4.8%) had a local complication (wound infection) and 5 patients (23.8%) presented transient instability, either hemodynamic ($n=2$ patients (9.5%)), respiratory ($n=1$ (4.8%)) or combined ($n=2$ (9.5%)).

Conclusion Surgical PDA closure using anterior mini-thoracotomy is an effective and safe technique under experienced hands, for PDA closure in very low weight preterm babies. This technique needs to be compared with transcatheter PDA closure currently proposed for those very small babies.

Keywords PDA; Anterior mini-thoracotomy; Very preterm babies; Weight under 1.3kgs

Disclosure of interest The authors declare that they have no competing interest.

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P6

Electrical cardiometry and detection of left ventricular failure in right ventricular heart diseases



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Background Early and easy to do detection of left ventricular (LV) failure is crucial to improve following and outcomes of patients with right ventricular (RV) overload in congenital heart diseases. Electrical cardiometry (Osypka medical) is easy handling, even in medical office or in pre-hospital condition, and can provide cardiac output, and a new contractility index (ICON) supposed to be independent from load conditions. ICON have never been previously challenged to our knowledge.

Objectives We aim to compare ICON with the only contractility parameter independent from load conditions: the elastance slope (Emax).

Methods Using porcine models of Fallot repaired and pulmonary hypertension (PH), we assess LV function using conductance catheter and electrical cardiometry devices over 4 months after surgery. We measured ICON, Emax, Contractile reserve (Δ Emax) and VIC (respiratory variations of ICON) at basal state and after adrenergic stimulation (Dobutamine).

Results Three animals of each group were compared with 6 controls. Non parametric correlation (spearman) highlights at basal state a non significant and low correlation between ICON and Emax and Δ Emax ($r=0.5$). However after Dobutamine, correlation is important and strong with $r=0.98$ between ICON/Emax (0.05) and 0.89 between VIC/Emax. We did not find strong correlation between Δ Emax and VIC or Δ ICON.

Conclusion These results obtain on a small in vivo/animal cohort highlight than electrical cardiometry device could be a useful and easy handling (4 skin patches) tool for LV failure and loss of contractility early screening, specially after adrenergic stimulation and stress conditions. It could provide precious help in patients following.

Disclosure of interest The authors declare that they have no competing interest.

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P7

Are grown-up patients with congenital heart disease and mechanical valve using self-testing INR device? Experience feedback in a French population



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Background The Coaguchek INRange[®] is a self-testing meter to measure the INR, that is reimbursed in France since August 2017 for patients with mechanical valve.