

Conclusion: There are only minor between groups of health care professionals in terms of speed and accuracy. The NLS method is faster and may be more accurate.

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HEART RATE ASSESSMENT, RIGHT ON TIME (HEART). EFFECTS OF TRAINING HEART RATE ASSESSMENT IN NEONATAL RESUSCITATION: PERFORMANCE, CONFIDENCE, STRESS LEVEL

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Background and aims: Stethoscopic heart rate estimation has previously been shown to be inaccurate in manikin models. We aimed to determine whether training could improve accuracy, and determine any association with perceived stress and confidence levels, in paediatric specialist registrars (SpRs).

Methods: Prospective, simulation study involving an intervention group of 17 Paed SpRs and 22 controls (paediatric, anaesthesiology, obstetric SpRs and midwives without training intervention) assessing HR by stethoscope in a VitalSim© manikin. HR was randomly set at 40,50,70 and 80 BPM. Absolute HR was assessed in the first scenario, HR range (<60,60-100,>100) during bag and mask ventilation in second scenario and after three cycles of compressions and ventilation in third scenario. This was repeated 2 weeks after a training intervention.

Results: There was a non-significant increase in accurate HR assessment in the first scenario in the intervention group relative to the control group (17.7% vs. 9.1%, OR 1.7, 95% CI 0.4-6.4), and non-significant shorter time to determine HR in the second scenario in the intervention group as compared to the control group (Beta -0.03, $P=0.094$). Stress level was significantly lower after training in intervention and control group ($P<0.05$). There was a trend towards higher level of confidence in intervention compared to the control group (Beta 0.27, $P=0.092$). Lower stress and higher confidence level were associated with shorter time to determine HR (Beta 0.59, $P=0.045$, Beta 0.38, $P=0.029$, respectively).

Conclusions: Training in neonatal resuscitation was not associated with significant improvement in performance, although there were trends toward higher accuracy and shorter time to determine HR. Confidence and stress level were associated with shorter time to determine HR.

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WHEN THE FEVER IS NOT INFECTION...

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Background and aims: The systemic form of juvenile idiopathic arthritis (JIA) comprises 10-20% of all JIA cases. The diagnosis is based on the association of the fever >6 weeks of duration with the arthritis, but the latter can be absent in the beginning.

Methods: Discussion of a case.

Results: AFAC, 6 years-old female, previously healthy. She went to our hospital because of vesperine fever with 12 days of evolution, accompanied by claudication and bilateral knee pain, without local inflammatory signs. On the admission she was febrile and she had a pinky macular rash in the trunk that resolved spontaneously. The rest of the exam was normal. The analysis revealed mild anemia (10.9g/dL), moderate leukocytosis with neutrophilia, thrombocytosis, elevated reactive C-protein (9.9mg/dL) and erythrocyte sedimentation rate (113mm). The cultures, immunologic study, viral serologies, Widal, Wright and Weil-Felix reactions did not reveal any change, as well as the chest radiography, echocardiogram and Mantoux test. During the internment she maintained the fever (1 episode/day), accompanied by migratory arthralgia (big joints), with alleviation with ibuprofen (7mg/kg/dose). At day 6 inflammatory signs (redness and edema) were present in her right elbow. She was discharged only with ibuprofen, but now she is treated with metotrexato and deflazacort, with good response.

Conclusions: With this case, we want to emphasize an uncommon disease, which diagnosis is based on the clinical findings, since the laboratory is not specific. The confusion with infection is very frequent and can lead to unnecessary prescription of antibiotics.