Method STAK is a 12 week, activity programme including activity diary, street dance DVD, circuit training and, for children at or above the 91st centile weight for height, motivational interviewing and goal setting. STAK was evaluated in a cluster-randomised trial in 24 schools. Children aged 9 to 11 were screened for overweight, low exercise self-efficacy or asthma. Twelve schools were randomised to receive the STAK intervention and 12 to control. BMI, waist circumference and exercise self-efficacy were assessed at baseline and post intervention (4 months).

Results Of the 2479 children screened, 1065 children (43%) met the study inclusion criteria. Parents of 424 (40%) children consented to their child’s participation with 4 months follow-up data available for 592 (92%). The groups were well matched at baseline. After controlling for baseline values and time between testing, children in the intervention group had higher total self-efficacy at 4 month follow-up. In the group of children who were overweight at baseline (=>91st centile), those in the STAK intervention group had smaller waist circumference and lower BMI at 4 month follow-up.

Conclusion Preliminary analysis suggests that a targeted activity intervention has benefits for children at risk of obesity. Future analyses will explore if benefits are sustained at 12 months follow-up.

RESISTIN - A NOVEL FEATURE IN THE DIAGNOSIS OF SEPSIS IN PREMATURITY NEONATES doi:10.1136/archdischild-2012-302724.0051

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Objective To evaluate the efficacy of resistin in the diagnosis of sepsis and to compare with C-reactive protein (CRP) in preterm infants.

Study Design Totally 80 preterm infants were prospectively included in the study. Blood samples were collected within the first hour of life, on first and third days of sepsis for basal resistin, basal CRP, CRP-1, CRP-3, resistin-1 and resistin-3 levels. Septic patients were divided into two groups as GR-negative and GR-positive sepsis group.

Results Basal resistin and CRP levels were 14.0 (4.7–31.1) ng/ml and 0.5 (0.2–2) mg/dl. Culture-proven sepsis was diagnosed in 20 infants. Resistin-1 and resistin-3 were significantly higher than basal resistin levels (p<0.01) and positively correlated with CRP. The area under curve values for CRP and resistin were 0.714 and 0.984, respectively (p=0.039). Resistin-1 and resistin-3 levels were significantly higher in GR-negative sepsis group than GR-positive (p<0.001).

Conclusion We showed that resistin had an efficacy superior to that of CRP in the diagnosis of sepsis in preterm infants. Resistin can be used as an early marker for sepsis in premature infants. Further studies are needed in larger groups to better understand the role of resistin to determine cut-off values for Gram-negative and positive sepsis.

PAEDIATRIC NEUROLOGICAL DISEASES: WHAT DOES ACTIVE CANADIAN SURVEILLANCE TELL US? doi:10.1136/archdischild-2012-302724.0052

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