

Method This observational survey was prospectively conducted between Jan 2010 and April 2011. Precipitants (parents or other primary care givers) of infants on home oxygen were identified through the Neonatal Outreach Referral Records. A questionnaire of 22 items was sent out to all eligible participants.

Results 18 parents/carers participated in the survey. The feedback showed that having home oxygen affected their family and social life. Support was given by health care professional regarding use of the home oxygen and safety advice in emergencies, however some of the issues identified were out of the control of the health professionals.

Conclusions Awareness of the psychological impact of discharging infants on home oxygen to the parents should be important to all health professionals involved. A standard training for the Neonatal outreach nurses and Children home Care Team should be considered in assessment of mild depression or identifying triggers of stress prior to discharge and within the community.

1694 ALLERGY DISEASES IN CHILDHOOD AND GENERAL PEDIATRICIAN

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Aim To confirm the role of the general pediatrician in establishing the early diagnosis of allergy diseases and avoid the complications.

Material and Methods Our study is prospective for the period January 2010 - December 2011. We found out that 85 children, 39 male and 46 female, from 0–18 years old were with any kind of allergy illness. The children were divided in three groups from (0–6, 7–14, 15–15 years old). The procedures that we used to establish the diagnosis of Allergy Diseases were simple: Complete anamnesa, Questionnaires, Keeping a diary of the symptoms, Completely examination. With the help of these procedures we put initial diagnosis and confirmed the same during the skin allergy tests.

Results During this period we made skin allergy tests at 159 children. At 83 children in 2010, 76 children in 2011. From them 68 were with some allergy diseases in 2010 and 55 in 2011. With asthma were (51%) of children, with rhinitis allergy (12%); dermatitis allergy (13%), vomitus and abdominal colic 2.4%, laryngitis allergy (1.2%), conjunctivitis allergy (1.2%). While in 2011 we had 28% children with asthma, 18% with rhinitis allergy, 18% dermatitis allergy and urticaria, 1.3% laryngitis allergy and 1.3% conjunctivitis allergy. At the last we began with the adequate therapy.

Conclusion Thanks to our work we established the right diagnosis very soon, and we managed to avoid the complications which could be fatal for the child's growth.

1695 MOTHERS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND NEONATAL LUPUS. WHAT YOU NEED TO KNOW. A PRESENTATION OF 5 CASES

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Aim Neonatal lupus (NL) is a rare disease (1/12000–1/20000 newborns). It appears in the neonatal period of newborns of mothers with systemic lupus erythematosus (SLE) or other connective tissue diseases. It's caused by the transfer of antibodies (Anti-Ro/Anti-La) from the mother to the fetus through the placenta. We recall the main features of the NL and the management of the child who have a mother with SLE.

Methods We present 5 cases of mother-child diagnosed with SLE or NL. Four cases corresponds to mothers diagnosed with SLE (two or them, with children diagnosed of NL), and the other case is a NL

with an asymptomatic mother without the diagnosis of SLE until this moment.

Results Two or the four mothers diagnosed with SLE had children with NL (one with dermatologic clinic and the other with cardiac symptoms). These two mothers presented antibodies (Anti-Ro/Anti-La). The other two mothers didn't present these antibodies, so they had healthy children.

The fifth case was a newborn with a healthy mother, who was diagnosed with NL with dermatological features. After this, the mother was studied and had Anti-Ro/Anti-La antibodies.

No child diagnosed of NL had blood or liver disorders.

Conclusions We should study the children of mothers with SLE, particularly those with positive Anti-Ro/Anti-La antibodies, with the purpose of diagnosis of NL (particularly dermatological, cardiac, haematological and liver features).

If we suspect NL in a child of an asymptomatic mother, the presence of Anti-Ro/Anti-La antibodies in the mother and the newborn should be studies to confirm the diagnosis.

1696 SYSTEMATIC REVIEW OF ACTIVE SCHOOL TRANSPORT AND HEALTH RELATED OUTCOMES

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Background Active commuting to school (walking or biking) may be an important opportunity for children to accumulate adequate physical activity for improved cardiovascular risk factors, enhanced bone health, and psychosocial well-being and also decreased rates of metabolic complications and cardiovascular disease in later life.

Methods This article presents the results of a systematic review of the association between active commuting to school and health related outcomes.

Results Researches shows that Childhood obesity and physical inactivity and sedentary life are increasing dramatically in worldwide. physical inactivity is closely linked to bone health, cardiovascular disease, fitness and psychological factors. Recent studies have pointed out positive effects of active commuting on physical inactivity, overweight, obesity, survivors of childhood cancer, particularly brain tumors and acute lymphoblastic leukemia also demonstrate reducing in metabolic complications and cardiovascular disease in later life.

Conclusion Physical inactivity is a risk behavior for cardiovascular and some metabolic disorder, also Active school transport (AST) may be an important and easy source of children's physical activity (PA). Schools can promote public health by educating, planning and encouraging physical activity among children.

1697 PLAYING THE GAME: WORKING WITH YOUNG CHILDREN TO DEVELOP ASTHMA INTERVENTIONS

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Background Involving children in designing healthcare interventions is encouraged but challenging and often limited to teenagers. We conducted a feasibility study assessing three methods for prioritising asthma intervention components with children aged 6–12 yrs.

Methods Nineteen children prioritised 14 aspects of asthma management for intervention development using Diamond ranking (DR - equal ranks permitted), Standard Borda Ranking (SBR - no equal ranks permitted) and Budget Pie (BP - allocation of funds

according to priority). Child-friendly tools included discussions, postcards, toy money and board games.

Results DR and SBR were completed by all participants using the DR rankings as a baseline then separating equal ranked items to generate SBR rankings. Older children preferred BP as it allowed them to make choices according to need for improvement and therefore requirement for funds, rather than simply importance, but was only used successfully by those aged 8+.

BP can also demonstrate weighting. Managing Acute Attacks was prioritised 1st with all methods but only BP demonstrated strength of opinion: Managing Acute Attacks received £1430 in total, whilst the 2nd place issue received just £610.

Conclusions Young children can and should be involved with health services research. More effort needs to be dedicated to developing methods that enable Children's involvement.

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1698 KARATE INFLUENCES ON ASTHMA MANAGEMENT IN PRESCHOOL CHILDREN

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Background Examples of semi-contact sports include karate and its benefit influence on asthma in childhood. Specific treatment for asthma will be determined by pediatrician based on children age, overall health, medical history, extent of the disease, tolerance for specific medications, procedures, or therapies and expectations for the course of the disease.

Aims A target of this article is showing benefit of karate training in preschool ages on asthma management and course of disease.

Methods To verify the efficacy of karate on asthma, a complex psychomotor activity that enhances pulmonary capacity and lungs volume, and breathing regulations, as an intervention for asthma curing, ten children with asthma, ranging in age from five to seven years, and meeting diagnostic criteria for children asthma disorder were studied during two years period 2010–2011.

Results A higher prevalence of asthma has been reported in athletes specially in karate clubs for younger children but with better control of asthma. Risk of asthma decreased with number of years of training (odds ratio 2.02; 95% confidence interval 1.60–3.03; $p < 0.0001$), number of hours per week (odds ratio 1.74; CI 1.11–2.21; $p = 0.015$) and rank, specifically brown green belt versus lower belts (odds ratio 3.53; CI 2.82–6.28; $p = 0.007$).

Conclusions Karate is a relatively safe sport for preschool children and younger schoolers when properly taught and optimized for asthma management. These training principles are perhaps most useful early in a children patient's course when the setting of appropriate expectations is important in minimizing restrictions from treatment and karate activity.

1699 DISTRIBUTION OF CONGENITAL MALFORMATION IN A NEONATAL INTENSIVE CARE UNIT IN TURKEY

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Background and Aim Congenital malformations are one of the important reasons of mortality and morbidity in newborns. The aim of this study is to give the frequency and distribution of the congenital malformation in a neonatal intensive care unit from Turkey.

Method A retrospective analysis of congenital abnormalities in singleton births was performed to identify frequency, types, combined congenital abnormalities and distribution of malformation in newborns over a 7 year period. Congenital malformations were classified according to involved organ systems and also classed as single and multiple malformations.

Result 1024 newborns with congenital malformations (13.7%) were identified among the 7450 hospitalized newborns in neonatal intensive care unit (NICU). Mean birth weight was 2988±648gr, mean gestational age was 37.9±2.5 weeks. Consanguinity rate was 22.3%. Prenatal diagnosis rate was 11%. The most affected system was the cardiovascular system (68.8%). Most of the malformations (69.6%) were single malformations while 20.4% of the newborns had multiple major and 8.4% of the newborns had multiple minor malformations. On the other hand, 1.4%, 0.1% and 1.6% of the newborns had deformation, disruption and displasia, respectively. Chromosomal analysis was only performed 24.8% and 65.3% of them were in normal limits. The most frequently detected chromosomal abnormality was Trisomy 21. Overall mortality rate was 15.5% among the newborns with congenital malformations.

Conclusion The most common congenital malformation was cardio-vascular malformations in our hospital. Preventing and prenatal diagnosis of congenital malformations may help to reduce perinatal mortality and morbidity. Therefore, each country should establish its own national database for prevention and management of congenital malformations.

1700 EXPRESSION OF THE NUCLEAR FACTOR OF ACTIVATED T CELLS MRNA IN HUMAN FETAL LUNG

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Background and Aims The nuclear factor of activated T cells (NFAT) is a family of four transcription factors (c1, c2, c3 and c4) involved in vascular smooth muscle differentiation, contractility and hypertrophy. NFATc3 is required for hypoxia-induced pulmonary hypertension and for murine vascular patterning. High pulmonary vascular tone is necessary in the fetus and vasoconstrictors, such as endothelin-1 (ET-1), are required. ET-1 is a potent activator of NFAT but the role of NFAT in human lung vascular development is not known. We aim to study NFAT expression during mid-gestation in the human fetal lung.

Methods Human fetal lung tissue from 10 to 24 weeks of gestation was collected following elective termination (N:40). Gene expression of the NFAT isoforms c1, c2, c3 and c4 was measured in fetal lung tissue with qRT-PCR, normalized to GAPDH. Statistical analysis was performed using Spearman non-parametric correlation coefficient.

Results In the human fetal lung, NFATc1 expression increased with increasing gestational age ($R^2 = 0.2708$). NFATc2 expression remained stable ($R^2 = 0.0117$). NFATc3 expression increased ($R^2 = 0.1802$). Conversely, NFATc4 expression decreased with advancing gestational age ($R^2 = 0.3774$).

Conclusion The NFAT isoforms are expressed during mid-gestation in the human fetal lung showing different patterns of expression. NFATc1 and NFATc3 expression increased suggesting a possible role