Adolescent Medicine

About 3% of human fetuses are born small for gestational age (SGA). More than 90% of those SGA infants catch-up growth and normalise their body size by the age of 2 yr.

Longitudinal studies have disclosed that SGA-catch-up children tend to become hyperinsulinemic, vescerally adipose and to show an abnormal adipokine profile by 4–6 years of age, even if not obese. Between 6 and 8 years, their circulating levels of sex hormone binding globulin (SHBG) start to be low, and those of dehydroyepiandrosterone-sulphate (DHEAS) start to be high; in girls, precocious pubarche (pubic hair < 8 yr) may emerge as clinical marker. A mismatch between early adipogenesis and later lipogenesis, accounting for lipotoxicity, dys-adipokinemia and insulin resistance, seems to encompass this sequence; postnatal overweight amplify these risks. Beyond the age of 8 years, such SGA children tend to experience an early onset of puberty with rapid progression, that may lead to a lower adult stature; low birthweight girls with precocious pubarche may be also at increased risk for developing hyperinsulinemic androgen excess in adolescence. In these girls, insulin sensitisation with metformin started in prepuberty and maintained throughout puberty appears to decrease visceral and hepatic adiposity, and to have normalising effects on serum insulin, lipids, leptin and adipokines, on the tempo of puberty, on final stature, and on the prevalence of androgen excess in adolescence.

Paediatric Emergency Medicine I

SELF-REFERRALS AND TRIAGE, A THREAT TO THE PRACTICE OF PAEDIATRIC EMERGENCY CARE

H. Mass, General Paediatrics, Erasmus MC Sophia’s Children’s Hospital, Rotterdam, Netherlands

10.1136/archdischild-2014-307384.63

More than 25 million children visit annually the emergency department (ED) in Europe. The number of ED attendance, short stay-hospital admittances and children with minor problems is increasing. Are the current models for emergency care failing to meet the community needs? The challenge remains to prioritise and identify the potential severely ill child from the majority of children with self-limiting diseases. Delayed recognition and treatment of potential life threatening diseases may have disastrous implications.

Triage aims to manage patient flow safely at the emergency department and to ensure that patients, who need direct medical attention, are correctly identified and treated. The Manchester triage is an algorithm based on 52 flowcharts for specific presenting problems and discriminators indicate one of the five urgency categories. The system was first validated and modified for children at the emergency department in the Sophia Children’s Hospital. The modified MTS improved correct triage in different European emergency departments.

The next step is the clinical evaluation; the febrile child is the most common presentation. The predictive value of alarming signs of the NICE traffic light system and vital signs only had moderate predictive value for serious illnesses. The combination of alarming signs and CRP had good predictive value and this “feverkidstool” (www.erasmusmc.nl/feverkidstool) can be easily applied in practice.

Signs and symptoms could change in time and therefore safety netting is needed if the patient does not have a final diagnosis or a risk for complications. Risk factors for revisits and safety netting strategies are discussed.

Paediatrician Online

DO APPS MAKE PAEDIATRICIAN’S LIFE EASIER AND HOW?

A Hadjipanayis, Paediatrics, Larnaca General Hospital European University of Cyprus, Larnaca, Cyprus

10.1136/archdischild-2014-307384.64

In January 2007, Apple launched the first smartphone. Subsequently, smartphones that run the Android operating system were introduced in October 2008. Moreover in 2008 users of smartphones have the opportunity to run downloadable applications (apps) on their devices. Apps are software programs that have been developed to run on a computer or mobile device to accomplish a specific purpose.

Mobile health, or ‘mHealth’, is the use of portable devices, such as smartphones and tablets, for medical purposes, including diagnosis, treatment, or support of general health and well-being. Close to 100 000 apps are now available to assist health care professionals. It is estimated that by 2015 smartphone users worldwide will be more than 500 million and by 2018 there could be 1.7 billion mHealth apps worldwide.

The Manhattan Research/Google Physician Channel Adoption Study in June 2012 showed that 87% of physicians use a smartphone or a tablet device in the workplace. Physicians spend the majority (64%) of their online time looking for information to make or support clinical decisions, double the time spent reviewing print resources. Among physicians aged 55 and over, 80% own a smartphone.

Apps provide many benefits for paediatricians, allowing them to make more rapid decisions with a lower error rate, increasing the quality of data management, and improving practice efficiency and knowledge.

The aim of this article is to present the most popular apps which can be used to facilitate patient management. Some of these apps are Medscape, Epocrates, Bilicalc, Palmpedi, Derm101, Uptodate and Kidsdoc.

Primary Paediatrics

HEMANGIOMAS: ORAL PROPRANOLOL AND BEYOND

E Basaga, Dermatology, Hospital de La Santa Creu i Sant Pau, Barcelona, Spain

10.1136/archdischild-2014-307384.65

Hemangiomas are benign vascular tumours that slowly involute over many years. Therefore most hemangiomas do not require treatment. However approximately 38% of hemangiomas can be complicated depending on their subtype, location, and size. Straightforward indications for treatment include ulceration, interference with vital functions, or large size. Risk of disfigurement can be a more controversial indication. Since 2008, propranolol has dramatically changed the treatment of hemangiomas and is considered first-line treatment in complicated infantile hemangiomas (IH). In these years of clinical use, together with the results of a multicenter randomised clinical trial we have gained insight on efficacy and safety. Propranolol is highly effective and is usually given in a dose range of 2–3 mg/kg in BID for 6 to 9 months. Rebound after stopping treatment is possible in 15–19% of patients. Type of monitoring before initiating therapy has been modified over these past years and after the results of the clinical trial it is recommended a good physical
exam with cardiac auscultation and control of blood pressure and cardiac frequency. Because its efficacy and safety risk of disfigurement has become a common indication to treat. There are several factors of the hemangioma itself and location that may help to predict or anticipate the residuum after involution of the hemangioma is completed.

Social Determinants of Health

**15-066 CONCEPTIONS OF PARENTING IN DIFFERENT CULTURAL COMMUNITIES**

H Keller. Human Sciences, Culture and Development, Osnabrück, Germany

Parenting is a biological as well as a cultural project. Based in universal predispositions parenting strategies have emerged that are suited to best prepare the offspring for competence in a particular environment. Following the ecocultural model of development (Keller and Kärntner, 2013), environments in terms of milieus of sociodemographic variables can be identified which are associated with different socialisation strategies. In particular the embodiment of two universal human needs, which represent cultural values at the same time – autonomy and relatedness – characterise different images of infancy and childhood. In this presentation, three different environments with the respective cultural milieus will be portrayed: Western middle class families, subsistence based farmers and non-Western middle class families. It is apparent from birth on that different cultural milieus emphasise different socialisation goals, framed in different beliefs and practices. Developmental consequences of these different developmental trajectories will be briefly outlined. Practical implications for health and educational services in multicultural societies are discussed.

Toxicology, Pharmacology

**15-067 ACCIDENTAL POISONING IN CHILDREN**

S Mintegi, B Azkunaga, J Benito. Pediatric Emergency Department, Cruces University Hospital, Bilbao, Spain

Although all the preventive efforts made to avoid paediatric poisonings, these remain a major health problem. Non intentional poisonings in young children are the most commonly registered in the Paediatric Emergency Departments (PED). Although there is a great variability all over the world, most common way of poisoning is the ingestion of therapeutic drugs (frequently psychotropic medications), followed by household products, and not always kept out of the child’s reach and in their original container. CO inhalation and ingestion of pesticides are quite frequent in some regions.

Children are usually carried by their parents to the PED in the family vehicle just after the event. Poison Control Centres and Medical Pre-hospital Services are not often contacted by the families before going to the hospital. A large amount of children do not receive any treatment although 5–10% of the ingested substances are considered to be toxic in small doses. The administration of activated charcoal is the most common gastrointestinal decontamination procedure performed and ipecac is no longer used. However, there is a great variability in the management of these children.

Prognosis is usually good, being the death exceptional, and sequelae are very rare and usually related with the ingestion of caustic household products.

An exhaustive analysis is needed to design different improvement actions required to prevent these poisonings, to manage correctly these children adapted to best international practices and to use health resources in a better way.

Adolescent Medicine

**0-001 SIX YEARS OF ALCOHOL INTOXICATIONS IN ADOLESCENTS AND TREATMENT IN PAEDIATRIC DEPARTMENTS IN DUTCH HOSPITALS**

1N van der Lely, 2J van Hoof, 1G Boeynaems. Pediatrics, Reinier de Graaf Gasthuis, Delft, Netherlands; 1University of Twente, Behavioral Sciences Faculty, Enschede, Netherlands

Aim Alcohol intoxication in children and adolescents is a severe health concern in current paediatrics. In this longitudinal study we monitored intake and treatment of 3,286 adolescents in Departments of Paediatrics in Dutch hospitals over the years 2007 to 2012.

Methods From 2007 till 2012 we collected data on all adolescents (inclusion criteria: aged younger than 18 and with a positive BAC), treated by a paediatrician in a hospital. Within the Dutch Paediatric Surveillance System (NSCK), paediatricians report adolescents and fill in a questionnaire, making use of a patient interview.

Results In total 3,286 adolescents were treated, mainly (88%) related to severe alcohol intoxication; main age was 15.3 years, and 54% were boys. BAC level is 1.84 on average, and reduced consciousness last almost three hours. Almost 18% of the adolescents with alcohol intoxication drank themselves into the hospital in a bar or discotheque.

Conclusions Alcohol intoxication treatment remains an issue of importance. This dataset enables us to conduct longitudinal and interesting analyses on alcohol intoxication characteristics in youngsters, medical treatment, and events leading up to the intoxication.

**O-002 DEATHS DUE TO HANGING IN YOUNG PEOPLE - THE ‘CHOKING GAME’**

1F Finlay, 1S Ienton, 1J Fraser. 1Child Health, Sinona, Bath, UK; 2Bristol Children’s Hospital, Paediatric Intensive Care Unit, Bristol, UK

Background Child Death Overview Panels (CDOPs) in England are responsible for reviewing how and why children die, and should put in place interventions to try to prevent future deaths.

Method In one region 4 adolescents were found hanging from bunk beds, without obvious risk factors, raising the possibility that adolescents were playing the ‘choking game’ and death was unintentional. 150 other CDOPs were contacted to enquire whether similar hanging scenarios had been reported.

Results 62 adolescents were reported to have died from hanging, 27 from bunk beds.

Discussion The choking game is ‘self-strangulation or strangulation by another person, with hands or a noose, to achieve a brief euphoric state caused by cerebral hypoxia’. It is also known by