CME: Food allergy

The prevalence of food allergy is increasing worldwide, and it is an important cause of anaphylaxis. There are no local South African (SA) food allergy guidelines. This issue of CME was developed from guidelines devised by the Allergy Society of South Africa, the South African Gastroenterology Society and the Association for Dietetics in South Africa. Subjects may have reactions to more than one food, and different types and severity of reactions to different foods may coexist in one individual. A detailed history directed at identifying the type and severity of possible reactions is essential for every food allergen under consideration. Skin-prick tests and specific IgE (ImmunoCAP) tests prove IgE sensitisation rather than clinical reactivity. The magnitude of sensitisation combined with the history may be sufficient to ascribe causality, but where this is not possible a graded oral food challenge may be required to assess tolerance or clinical allergy. For milder non-IgE-mediated conditions a diagnostic elimination diet may be followed by food reintroduction at home to assess causality. The primary therapy for food allergy is strict avoidance of the offending food/s, taking into account nutritional status and provision of alternative sources of nutrients.

This issue of CME leads the generalist carefully through the epidemiology, diagnosis and management of the food allergic patient.

Preventing cervical cancer

Primary prevention of cervical cancer is now possible with the availability of human papillomavirus (HPV) vaccines targeting HPV types 16 and 18, which cause the majority of cervical cancers worldwide. The target population for primary prevention is initially girls aged between 9 and 11 years, attending primary school. Importantly, medical aids are encouraging vaccination of boys also!

In this issue we publish the first of a series of three papers that trumpet the success of the Vaccine and Cervical Cancer Screen (VACCS) project,[1,2] a school-based HPV vaccination project that gives reality to the announcement in May 2013 by Dr Aaron Motsoaledi, Minister of Health, that '… we shall commence to administer the HPV vaccines as part of our school health programme ...' against a background of an uncontrolled cervical cancer epidemic resulting from high prevalences of HPV and HIV and a relatively unsuccessful cervical cancer screening programme.

Do bacterial STIs enhance HIV susceptibility?

Sales *et al.*[3] provide evidence how, at a biological level, HIV susceptibility may be enhanced by bacterial sexually transmitted infections (STIs) mediated by *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in sexually active women. Broadly, the endotoxic lipopolysaccharide component of bacterial STIs, which are very common in sexually active women, can regulate expression of HIV receptors in the cervical epithelium by increasing the abundance of cell surface machinery used by the HI virus for establishment of infection.

Testing hearing with smartphones

We drew attention in the December *SAMJ* to use of the cell phone camera in photographing the red reflex in infants' eyes to ensure early pickup of retinoblastoma.[4] Smartphones have the potential to test hearing through audiometric applications. Given the upsurge of mobile technology in Africa, Peer and Fagan[5,6] evaluated the uHear app (using an Apple iPhone) as a possible hearing screening tool in the developing world. They conclude that it is a feasible screening test to rule out significant hearing loss (pure-tone average >40 dB). It is also highly sensitive for detecting threshold changes at high frequencies, making it reasonably well suited to detect presbycusis, and ototoxic hearing loss caused by HIV and tuberculosis medications. Its portability and ease of use make it opportune to use in communities that lack screening programmes.

Blunt thoracic trauma in children and adults

Few researchers have investigated differences in injury patterns between adults and children. Skinner *et al.*[7] compare and contrast the incidence and outcomes of blunt thoracic trauma in these two groups.

The commonest mechanism of injury was a motor vehicle collision (MVC), with 75.0% of children being injured during (preventable!) pedestrian MVCs. Injury patterns differed between adults and children. Children are far more likely than adults to sustain head injury together with their thoracic trauma, because of their proportionally larger head-to-thoracic ratio and their injury as pedestrians. Thoracic injuries consisted predominantly of pulmonary contusions, rib fractures, flail chests and blunt cardiac injury, the incidence of pulmonary contusion being highest in the paediatric group. The increased skeletal compliance and absence of rib fractures in children can make the diagnosis of pulmonary contusions especially difficult – absence of rib fractures in injured children does *not* signal its absence. Blunt cardiac injury in children is relatively underdiagnosed, but when clinically relevant diagnostic criteria were applied, the authors found a surprisingly high incidence of 10%.

Medical certification of death in SA[8]

We remain notoriously sloppy about filling in the Medical Certificate of Cause of Death, despite improvements to the SA Death Notification Form (DNF). The quality of cause-of-death information remains suboptimal. Clearly, the DNF should be completed truthfully and accurately, and confidentiality of the information on the form maintained. Despite the high prevalence of HIV, estimated to be around 12% according to official statistics, HIV purportedly accounts for only 3% of deaths nationally, signalling gross under-reporting.

There are other quality concerns in the statistical information: a quarter of deaths were reported as due to ill-defined or unknown natural causes (including cardiorespiratory arrest, heart failure, hypoxia, and other nonspecific causes of death), which do not provide information useful for planning prevention strategies. There is also uncertainty about the manner of death for injury deaths, making it difficult to determine whether the injuries were caused by accidents, homicide or suicide. Deaths from gunshot injuries of undetermined intent are currently coded as accidents, thus under-representing homicides in Statistics South Africa data, and misrepresenting the real burden from homicide deaths.

A guide to completing the Notice of Death/Stillbirth (DHA-1663) is available at http://www.sahealthinfo.org/bod/deathtraining/guideline.htm

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