Enterovirus 71 causes hand, foot and mouth disease outbreak in Cambodia

An undiagnosed respiratory illness has been taking a toll on the lives of children in the remote southern areas of Cambodia since April 2012. The Ministry of Health (MoH) of the Kingdom of Cambodia was alerted to the outbreak when 62 cases of an undiagnosed respiratory illness with neurological manifestations were reported, mostly from the Kantha Bopha Children’s Hospital in Phnom Penh in southern Cambodia. Most of the affected children were below 3 years of age, and the symptoms were fever, respiratory distress and neurological deficits.

According to the International Health Regulations, the MoH notified WHO of this unexplained illness and the two, together with partners such as the Institut Pasteur du Cambodge and the Centers for Disease Control, initiated a joint investigation. Meanwhile, the neighbouring countries were alerted so that they could take precautions against the import of the disease. The joint investigation identified 78 cases (including the 62 initially reported), of which 61 met the specific case definition constructed for the purpose of the investigation. Fifty-four of these 61 cases had succumbed to the illness.

The investigations included an evaluation of the surveillance data, hospital records and laboratory tests. Specimens from 31 cases were tested at the Institut Pasteur du Cambodge. Enterovirus 71 (EV-71) was the organism isolated most commonly, though some samples tested positive for pathogens such as Streptococcus suis and Hemophilus influenzae Type B. On the basis of these findings, the concluding report of the joint investigation team stated on 13 July 2012 that the outbreak was mostly due to hand, foot and mouth disease (HFMD) caused by EV-71. The investigation also revealed that in some cases, the treatment had included steroids, which are known to worsen EV-71 infection.

HFMD is an acute infectious disease caused most commonly by Coxsackie virus A16. However, it can also be caused by EV-71, which is usually responsible for outbreaks of HFMD.

Following the outbreak, the MoH stepped up surveillance activities and launched campaigns to increase the public’s awareness of HFMD. Attempts were made to promote personal hygiene, and also to facilitate the early identification, diagnosis and treatment of affected children.

TAMOGHNA BISWAS, Kolkata, West Bengal

Parthenium hysterophorus as Ganesh Puja Patri: A disaster in the making

Ganesh Chaturthi (Vinayaka Chavithi) is a major Hindu festival that is celebrated across the world, not only in the home but also at the community level. Since time immemorial, a unique feature of the worship of Lord Ganesha (Vinayaka) during this festival has been to offer patri, i.e. leaves of 21 varieties of plants which have aromatic or medicinal properties. Children going around the neighbourhood with their fathers and maternal uncles to fetch the patri for worship was once a common sight. This tradition ensured that knowledge of flora was passed on from one generation to the next. In recent years, there has been a gradual erosion of this tradition, at least in cities, and it is now common to see road-side vendors selling a bizarre collection of leaves, most of them from plants that do not belong to the list of 21 traditional varieties.

In 2012, too, there have been reports from several parts of Andhra Pradesh, including Tirupati, of vendors selling Parthenium hysterophorus (Congress grass)—considered to be a dangerous and toxic weed—as Ganesh Puja patri. This notorious weed is ubiquitous in India, and is seen growing in abandoned lands and residential colonies, along railway tracks and roads, etc. Unsuspecting people who have been handling this weed with misplaced devotion have been exposing themselves to its ill effects, such as its propensity to cause allergic contact dermatitis and allergic respiratory reactions that are sometimes life-threatening, especially in the case of children. Further, environmentalists have expressed concern over the casual way in which the remnants of the patri are discarded, resulting, as it can, in the spread of this noxious weed. There is a need for agencies such as the Pollution Control Board to take preventive action to check the spread of the weed. Meanwhile, physicians should be aware that this could be a possible cause for the condition of patients presenting with new allergies during this time of the year.

ALLADI MOHAN, Tirupati, Andhra Pradesh

Indian Journal of Medical Research enters its centenary year

2012 appears to be an important year for journals and their anniversaries: The New England Journal of Medicine celebrates its bicentennial, the Canadian Medical Association Journal has just completed its centenary, The National Medical Journal of India celebrates a quarter century of its existence and the Indian Journal of Medical Research has entered its centenary year!

In the early part of the twentieth century, when India was reeling under the burden of several life-threatening diseases, such as malaria, filariasis, kala-azar, plague, tuberculosis and leprosy, and medical research was gradually gaining momentum, there was no journal to disseminate the scientific information. That was the period which saw the birth of many research institutes of high standards, including the Indian Research Fund Association (IRFA, now the Indian Council of Medical Research [ICMR]) in 1911. Most of the work done in India was being published in British journals or remained buried in the files of government offices. In order to fill this gap, the Indian Journal of Medical Research (IJMR) was started by the IRFA in 1913. The journal was mandated to publish research work being conducted in India on infectious diseases, etc. The first issue of the IJMR was published in July 1913. Sir Pardey Lukis, the then Director General of the Indian Medical Services, was the first editor of the journal.
Researchers show gender disparities among Indo-Canadian live-births

There are gender disparities among children delivered by Canadian mothers of Indian origin, as shown by clinician scientist Dr Joel Ray and his colleagues at St Michael’s Hospital, Toronto, Ontario. He and his colleagues reviewed the trends in their provincial birth registry to explore the potential severity of this issue within a regional context. The results of their review of singleton births from 2002 to 2007 were quite striking (CMAJ 2012;184:E492–6).

The outcomes both of parity and infant gender were compared on the basis of the mother’s country/region of birth. There were no significant gender differences among the first-born children of mothers born in Canada and of those who were born elsewhere and had immigrated. However, this pattern changed in subsequent pregnancies, most notably among Indian- and Korean-born mothers. The trend persisted among Indo-Canadian mothers even in their third pregnancies. Interestingly, the same pattern was not observed among Pakistani women.

The authors did not attempt to draw any conclusions about the nature of these differences, stating that their study suffered from the limitation of lacking linked data on the termination of pregnancy in the same cohort of women. However, the public media was quick to explore the results of their review. The evil of female infanticide and the pressure to deliver male children have long plagued Indian women. The issue of gender discrimination is closely tied to medical practice. Ray et al. were prompted to conduct this research because of an editorial in the Canadian Medical Association Journal by the Interim Editor, Dr Rajendra Kale (CMAJ 2012; 184:387–8. Erratum in: CMAJ 2012; 184:792), on female infanticide. In his editorial, Dr Kale criticized medical associations in Canada for doing too little to protect the rights of the female foetus, paying only ‘lip service’ to the cause and ‘a band-aid for the souls of those who draft policy’. He concluded that ‘if Canada cannot control this repugnant practice, what hope do India and China have of saving millions of women?’

Twin Ebola outbreaks in Africa: Uganda and Democratic Republic of Congo affected

The Ebola virus, which was first discovered in 1976 following two simultaneous outbreaks in Sudan and the Democratic Republic of Congo (DRC), resurfaced again in July and August 2012, this time in Uganda and the DRC. The twin outbreaks were characterized by severe viral haemorrhagic fever.

The outbreak of Ebola haemorrhagic fever (EHF) first started in the district of Kibaale in western Uganda in the first week of July 2012. It was notified by WHO on 29 July 2012, subsequent to laboratory confirmation at the biosafety level-4 laboratory run by the Centers for Disease Control (CDC) in Uganda. By then, 14 people had already died. However, due to swift action by the Ugandan Health Ministry, along with WHO, Médecins Sans Frontières (MSF —Doctors Without Borders) and the CDC, the outbreak was rapidly brought under control. According to data available on 31 August 2012, no new confirmed cases of EHF had been reported since 3 August 2012. With the incubation period of EHF being 21 days, this just about heralds the end of the outbreak. The Ugandan government, however, is yet to declare the nation free of Ebola. The total number of deaths due to EHF in Uganda was 17. Meanwhile, on 17 August, the DRC notified WHO of 10 suspected cases and 6 deaths due to an outbreak of EHF in the eastern flanks of the nation. At the end of August the authorities were still struggling with EHF as it has already killed 11 and the outbreak showed no signs of subsiding.

WHO has confirmed that the two Ebola outbreaks are not linked epidemiologically since the one in Uganda was due to Ebola subtype Sudan, while the one in the DRC was due to Ebola subtype Bundibugyo. There are five subtypes of Ebola, the other three being Zaire, Reston and Côte d’Ivoire (Ivory Coast). There is no known treatment or vaccine for EHF and the maintenance host of the virus is yet to be discovered. It is, however, known that Ebola gets introduced into the human population through contact with the blood, secretions, other body fluids or organs of infected animals. Human-to-human transmission is mainly via contact, which makes medical staff particularly susceptible. The current epidemic resulted in the death of many health workers. The case fatality rate of EHF is 90% (data source: Global Alert and Response, WHO and MSF).

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