HOSPITAL AUTHORITY

CICO's Biweekly Update

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Highlights on the Use of Vaccine

Dengue Vaccines

In a clinical trial of Dengue vaccine, CYD-TDV, it was revealed that participants without previous dengue virus infection before vaccination had a higher risk of severe dengue and hospitalization. The World Health Organization (WHO) then recommended that the dengue vaccine should not be administered to individuals who have not been previously infected with dengue virus.

In April 2018, WHO Strategic Advisory Group of Experts on immunization further advised countries to include pre-vaccination screening when considering CYD-TDV vaccination as part of their dengue control program, so that only dengue-seropositive persons are vaccinated. The WHO will soon release a revised position paper on dengue vaccine later this year.

Pneumococcal Vaccine

Substantial higher risk of Invasive pneumococcal disease (IPD) in persons at young and old age, and increasing pneumococcal resistance to antibiotics underlines the importance of vaccination. There are two types of pneumococcal vaccines available in the market, namely a 23-valent pneumococcal polysaccharide vaccine (23vPPV) and pneumococcal conjugate vaccines (PCV). Immunogenicity studies showed that PCV13 elicited better immune response for serotypes commonly covered by both vaccines, while the 23vPPV contains 11 additional serotypes and theoretically offers extra protection.

Locally, the Scientific Committee on Vaccine Preventable Disease (SCVPD) has recommended high-risk individuals aged 2 years or above to receive a single dose of PCV13, followed by a single dose of 23vPPV one year later. For those who have already received 23vPPV, a single dose of PCV13 should be administered one year later. For those who have already received any PCV13, a single dose of 23vPPV should be administered one year later.

Strategies on Active Surveillance for CPE – At a Glance

Active surveillance for carbapenemase - producing *Enterobacteriaceae* (CPE) involves performing screening of patients who might not be epidemiologically linked to known CPE patients but who meet certain pre-specified criteria. The epidemiological data suggests that CPE currently are primarily isolated from individuals with healthcare exposures and the chain of transmission appears to occur in healthcare settings. Therefore, overseas health authorities have established surveillance criteria to be performed when patients are admitted to the hospital setting, and mainly target patients with healthcare exposure, as summarized in table 1.

Table 1: Summary table on active surveillance criteria among overseas health authorities and HA

	Screening strategy	PHE, UK (2013)	CDC, US (2015)	ACSQ, AUS (2017)	WHO (2017)	ECDC (2017/18)	HA, HK (2016)
Overseas-related	**Hospitalized in an overseas hospital**	Within the past 12 months	Within the past 6 – 12 months	Within the past 12 months	Yes	Within the past 12 months	Within the past 12 months
	Directly transferred in from an overseas hospital	---	---	Yes	---	---	---
	Resided in an overseas residential aged care facility within a certain period	---	---	*Removed in 2017 version*	---	---	---
Risk factors-related	**Hospitalized in a local hospital**	Within the past 12 months	Within the past 6 – 12 months	---	---	Within the past 12 months	Optional
	Previously colonized or infected with a CPE	Yes	Yes	Yes	Yes	Within the past 12 months / risk assessment by admitting physician	Yes
	Identified as a close contact with a confirmed CPE case	Yes	Yes	Yes	Yes	Yes (including household contact)	Yes
	Epidemiology of admission units, patient who may be at risk of CPE acquisition and infection	---	ICU	ICU, haem/onc, severe burn, transplant, renal haemodialysis, aged care& GI survey	Immunosuppressed, ICU, transplant, haem	ICU, onc-haematology	---
	Exposed to healthcare procedure	---	---	---	---	Dialysis or cancer chemotherapy in the past 12 months	---
Prevalence	**Single / periodic point prevalence surveys**	---	Risk assessment	Risk assessment	---	---	---
	Repeated prevalence survey in high risk unit	---	Risk assessment	Risk assessment	---	---	Day 14 (Optional)
	Opportunistic screening (e.g. all diarrhoeal specimens)	---	---	Risk assessment	---	---	Stool, CD (Sentinel)

SAVE LIVES – Clean Your Hands: Hand Hygiene Promotion in KEC

Maintaining proper hand hygiene is a fundamental and effective measure to prevent and control infections. To support the WHO and HA hand hygiene initiative, KEC Infection Control Teams organised a series of promotion activities in May.

United Christian Hospital (UCH)

UCH conducted visits to clinical areas, displayed banners and posters to raise staff awareness and promote patient engagement on hand hygiene. Highlight of the program occurred on 25 May. More than 100 staff attended the annual hand hygiene promotion and prize presentation program. Staff enjoyed snacks and received hand hygiene education via various games and souvenirs. Clinical units with outstanding hand hygiene performances were praised and honoured.

Photo 1: Hand Hygiene Campaign Prize Presentation Ceremony in UCH

Photo 2 & 3: Annual hand hygiene promotion and prize presentation program

Tseung Kwan O Hospital (TKOH)

Photo 4: Ward visit on hand hygiene promotion day in TKOH

The main themes for 2018 are promotion of Five moments in staff and promulgation of hand hygiene in patients. In the program of "Patient's moment for hand hygiene", the concept was introduced to staff through workplace visits, briefings and souvenirs to enhance their support to promote patient hand hygiene.

Haven of Hope Hospital (HHH)

Both 14 & 15 May were designated as "Hand Hygiene Promotional Day", over 200 participants joined the activities. A video show and a total of four game booths were designed to enhance staff awareness on Five Moments and Seven steps via card matching, proper hand hygiene technique by UV fluorescence, role of hand hygiene using finger dabs on agar plates.

Photo 5: Hand hygiene promotion day in HHH

Photo 6: Hand hygiene promotion activities in HHH