Tackling infectious diseases in primary care

Ng CJ

Editor in Chief

Dengue, tuberculosis (TB) and upper respiratory tract infections (URTIs) are three common infectious diseases encountered in the primary care setting in Malaysia. This issue of MFP features three review articles that highlight the diagnostic and treatment challenges faced by primary care doctors when managing these conditions.

Lum et al emphasise the importance of recognizing the three phases of dengue fever, i.e. febrile, critical and recovery phase, and monitoring the patient's clinical and blood changes according to these phases. In particular, warning symptoms (e.g. vomiting, abdominal pain, bleeding) and rising haematocrit are associated with plasma leakage, which often coincide with defervescence during the critical phase. However, the disease progression of dengue is variable. Therefore, timely recognition of danger signs and rehydration is crucial in the management of dengue fever. For this, primary care doctors play a pivotal role in educating patients and ensuring timely referral for admission.

Pang addresses a less-discussed issue of latent tuberculosis infection (LTBI), which is increasingly being recognised as a measure to reduce TB transmission through close contact investigations. Screening for LTBI in close contacts of patients with TB has been advocated in countries with low disease burden and rich resources. However, in Malaysia, this practice remains controversial and the local guideline recommends that only close contacts of high-risk TB patients should be screened. Tuberculin skin test is the recommended screening tool but has its limitations; the cut-off level depends on patients' immune status and exposure risk. Newer test such as interferon gamma release assay is promising but is costly and needs more research evidence. Therefore, evidence to screen and treat LTBI is still weak and should, at best, limit to close contacts of high-risk populations.

Excessive antibiotic use in URTIs remains a problem in many parts of the Asia Pacific region. Teng revisits this issue by searching systematically for new evidence in the region and he confirms that there are still few studies on URTI and antibiotic use. (3) Antibiotics have been used in URTI to treat Group A beta-haemolytic streptococcal (GAS) pharyngitis so as to prevent rheumatic fever. GAS infection is increasingly uncommon and the preferred antibiotic, penicillin V, is often not the drug prescribed in actual clinical practice. In addition, the lack of accurate clinical diagnostic prediction rule and test makes the diagnosis of GAS infection difficult. This contributes to over prescription of antibiotics and hence the growing problem of antibiotic resistance.

I hope that this issue of MFP will help you keep abreast of the current evidence on dengue, TB and URTI.

References

- 1. Lum CSL, Ng CJ, Khoo EM. Dengue fever. Malays Fam Physician 2014;9(2):2-10.
- Pang YK. Close contact investigation of TB in high burdens, low- and middleincome countries. Malays Fam Physician 2014;9(2):11-7
- Teng CL. Antibiotic prescribing for upper respiratory tract infection in the Asia-Pacific region: a brief review. Malays Fam Physician 2014;9(2):18-25