Old Problems in the New Era, Can We Find the Solutions?

In this issue, we have several original articles from different countries dealing with totally different clinical problems. However, they do share some common ground. They represent existing old problems remain unresolved over the years. Unresolved problems may be due to inconsistency in previous study results; rarity of the disease process or complexity in the pathogenesis in which confounding variables may affect the interpretation.

One of the problems is to verify the influence of anticonvulsants such as phenobarbital on thyroid function. This has been noted since the 70’s. From then on, there are controversial reports in the literature. In this issue, a small scale study showed that after 12 months of phenobarbital treatment, it does not appear to increase the risk of thyroid dysfunction. However, 2 larger studies recently both showed that phenobarbital might significantly affect the thyroid function and patients can have subclinical hypothyroidism (Yilmaz U, et al. Seizure 2014 & Lai EC, et al. Pharmacoepidemiol Drug Saf 2013). This article illustrated that some controversial findings in the past remained unresolved and well designed collaborative study with higher sample size is required to answer the question.

Facing with the conflicting results, clinicians should be cautious while they are prescribing phenobarbital. Regular assessment of thyroid function remains mandatory so timely identification and early intervention can be provided to patients with thyroid dysfunction.

Another old problem is Henoch-Schönlein purpura (HSP). While most of us can readily diagnose HSP if a child presents with typical purpuric rash. However, patient presents with either abdominal pain or limb tenderness without the typical rash may post a diagnostic challenge. Awareness of these possible manifestations can help to minimise unnecessary investigations and management. Most of the children with HSP recover but those with severe renal impairment may have long term kidney problem. Unfortunately, the aetiology; diagnostic markers and optimal treatment options remains largely unknown at the moment. Why this autoimmune vasculitic disease behaving in such a unique way deserves more in depth exploration.

Other long term unresolved issue is to identify a good predictive marker for asthma development or asthma severity. Matrix metalloproteinase-9 has a protective role in airway remodelling during asthmatic attack and therefore it has been studied recently. However, using various chemokines or cytokines in a cross sectional study can be misleading because patients are in different state of the diseases. It is further complicated by the treatment variation among different subjects recruited. It is more reliable to show the trend by performing a serial measurement for each individual patient. In addition, whether the chemokines
from patients' blood or sputum correlate better with the patients' status remains unanswered. Future study should address these queries in the study design.

Interestingly, we may find the hints of how to solve some old problems through revisiting the old practice. Simple life style and judicious use of antibiotic may help to prevent the emergence of antibiotic resistance. This is supported by the low prevalence of *Staphylococcus aureus* nasal carrier rate and low number of methicillin resistant strains found among healthy school children in the Tibet plateau. Though the low colonization rate can partly be affected by the low sensitivity of the method adopted (Yam WC, et al. *J Clin Microbiol* 2013). But after adjusting for this factor, the rate remains low. It has been found that methicillin resistant *S. aureus* infection is more prevalent in overcrowded environment with wide spread use of antibiotics. The Tibetan experience can give us insight as of how to control the problem of emerging antibiotic resistance.

This issue also records the proceedings of the Annual Scientific Meeting (ASM) of the Hong Kong College of Paediatricians (HKCP) that took place in December 2013. The proceeding not only captured various clinical and laboratory studies related to paediatrics and child health, it also vividly documented the essence of several thematic based panel discussions. Comparing to the advancement in clinical service, the research activity among local paediatric professionals has been lagging behind. This is an old problem of our local paediatric colleagues. However, the enthusiasm as seen in the HKCP-ASM together with the fruitful ASM of the Hong Kong Paediatric Society held in earlier 2013, we can feel that the inert atmosphere in paediatric research has changed. We hope our paediatric colleagues can keep this momentum going so we can reach another dimension in the future.

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