

Managing HIV Infection

HIV management has undergone major paradigm shift in the last years. What started as an incurable disease of the early eighties is now a manageable chronic illness of modern times. In transcribing medical advances into effective clinical practice, it is necessary that the medical profession prepares itself to face up the challenge. What then are the scientific advances behind the changes in treatment strategy? It is unfortunate that media attention has often clouded the subject by their parallel display of fables and facts. A careful examination would, nevertheless, bring into focus the three major achievements.

Firstly, our understanding of the viral dynamic of HIV has very recently become revolutionised. There is evidence that once established, HIV infection undergoes an extremely active process of replication. A staggering 10^{10} virions are produced daily. Secondly, potent anti-retroviral agents are now available. A combination of these drugs can bring down the viral load by two to three logs to undetectable levels. These drugs belong to three groups - NRTI (nucleoside reverse transcriptase inhibitors), PI (protease inhibitors) and NNRTI (non-NRTI). Most of the 12 anti-retroviral drugs approved by the FDA (Food and Drug Administration) of the US are available in Hong Kong. Finally, effective HIV management would not have been possible without the application of modern technology in clinical laboratory for the measurement of, for example, plasma viral load.

The impacts of medical advances are inter-related. On one hand, the very active viral replication supports the notion of an active treatment strategy for infected individuals. On the other hand, access to potent anti-retroviral therapy facilitates the realization of the goal of anti-HIV treatment. This, however, would not have taken place without the instrument (viral load measurement in this case) for monitoring the progress. Let us not forget that medical science

constitutes only one part of the foundation of effective management. The latter is incomplete without a coherent HIV clinical care system, maintenance of standard and mechanisms for strategy development.

Clinical management of HIV infection is fast becoming a complex issue and a discipline in evolution. It is not surprising that HIV medicine is emerging as a distinct specialty in medical practice, in developed as well as developing countries. The characteristics of HIV medicine are that it is evidence-based, science-driven, community-oriented, and public health minded. Translating into everyday language, HIV medicine is a fast-moving science in practice. It is the conviction of HIV medicine to adapt research, work with clients to cater for their needs, and build in the public health concept of prevention in those practising it. Prevention here refers not only to that of the infection but its progression to late-stage clinical disease.

What context shall HIV medicine be considered in the development of medical specialization or sub-specialization? Well, we need to be both innovative and professional in dealing with the subject. There are obviously good HIV medicine specialists who are general practitioners, venereologists, immunologists, ID specialists, or public health physicians. It is clearly more important to embrace the primary objective of developing HIV medicine - that of advancing the science and practice of HIV management. The development of HIV medicine should therefore not be a restrictive one. Taking one step back, the characteristics described above should not be limited to HIV medicine alone. Are they the very same features we expect from all medical specialties? What HIV has done is to bring out the focus and to reflect on the needs to practise clinical medicine which is evidence-based, science-driven, community-oriented and public health minded.