Closing Remarks

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Chairman

This Satellite Symposium, ‘Present Situation of MDR-TB in Asian Countries and the Possibility of MDR-TB Treatment by New Quinolones’ provided the excellent opportunity for a group of prominent clinicians in the area to present their most up-to-date information on the scourge of tuberculosis (TB) which is reappearing. And to call it a scourge, crisis or disaster of huge proportions is not exaggerating the problem, but merely accurately describing the size of the threat facing the world today. Unfortunately, many health care professionals and institutions still believe that there is a drug to treat any infectious disease. However, in recent years it has become increasingly obvious that the antimicrobial agents we have available have become less effective against many infectious agents, with experts in infectious diseases concerned about the possibility of a ‘post-antibiotic era’

Dr. Reichman provided a wonderful overview of the situation in the world today. Drawing on his expertise, he was able to describe the problem, its extent, how to deal with it and the importance of prevention. It is indeed salutary to be reminded that a third of the world’s population are infected with TB, with 3 million deaths attributed to it. And this is the present situation, before multidrug-resistant TB (MDR-TB) becomes even more of a problem. It is also important to be reminded that the development of resistance is not just due to lack of patient compliance, but is also caused by poor physician compliance. This stresses the need for clear guidelines for the treatment of TB in various settings, the treatment of MDR-TB, and prophylactic regimens which physicians can follow. But, consensus is a long way away. Dr. Reichman illustrated the difficulty in gaining agreement on the most appropriate preventive regimen when he reported the results from his Delphi survey of 31 tuberculosis experts. Symposia such as this one will certainly help, by disseminating information.

The role of the fluoroquinolone, ofloxacin, was specifically addressed as an adjunct in the treatment of TB. Ofloxacin has been shown to possess good activity against Mycobacterium tuberculosis both in vitro and in vivo. In addition, it has little toxicity in long-term administration, an important consideration in treating MDR-TB which requires long-term therapeutic schedules. Although not a component of first-line therapy, ofloxacin has an important role as a second-line agent and should be judiciously used as such.

Prevention was stressed as the best way of dealing with MDR-TB. This involves a two-pronged effort, firstly ensuring health professionals are aware of, and follow, treatment guidelines, and secondly ensuring patient compliance through directly observed therapy (DOT) regimens. By using DOT and introducing fixed-dose
combinations of anti-TB drugs, the rate of cure is drastically raised. However, these fixed-dose combinations need to be of demonstrated bioavailability to be of benefit, and in fact if not prepared properly can lead to the development of more resistance, worsening the problem. Dr. Jen Suo described the situation in Taiwan. Noting that the treatment outcome of MDR-TB is poor, with a success rate of approximately 50%, he also stressed the need for prevention. However, when MDR-TB has arisen, ofloxacin was used, and shown to be a better choice among the more toxic and less potent other second-line drugs.

The work of Dr. Zhang in China was reported with exciting results from both the Reformed Tuberculosis Programme in Beijing and the vast World Bank Tuberculosis Control Programme which was initiated in 1992. Covering colossal population numbers of 550 million people, this program uses fully supervised, 6-month short-course ambulatory chemotherapy to counter the problem of tuberculosis. The program in Beijing, which has a population of 11 million, was shown to be incredibly successful, with 95% getting fully supervised chemotherapy in 1995. This has resulted in the prevalence rate of smear-positive cases dropping by 87.4% over the period 1979-1990. The treatment of MDR-TB is also being addressed in China with results from a study using ofloxacin reported, which produced the very good cure rate of 77.3%. Further studies using ofloxacin in this setting are to be conducted.

Dr. Maranetra provided participants with an excellent overview of the TB situation in Thailand and described their strategies for dealing with MDR-TB. These included the development of targeted TB clinics to provide easy access to patients as well as overseeing DOT via home visits. The two key messages Dr. Maranetra emphasized were the importance of having a suitable infrastructure to ensure adequate TB therapy, and secondly, the importance of using DOT to increase compliance. These measures act to increase and maintain high levels of cure in order to prevent the development of MDR-TB.

The situation in Indonesia was reported by Dr. Hadiarto who, like Dr. Maranetra, commented on the importance of a good national eradication program implemented through effective ground level organization. In Indonesia, this is supplied by a mixture of primary health centers, and public hospitals. TB treatment needs to be accessible for all patients and compliance ensured. Results from a preliminary study using ofloxacin to treat MDR-TB were also reported, with a culture conversion rate of 55% after 3 months treatment. Dr. Hadiarto stressed the need for ongoing studies into this important area to elucidate the optimal dose and duration of ofloxacin in the treatment of MDR-TB.

Infection with M. tuberculosis remains a major global health problem with outbreaks of MDR-TB a huge cause for concern. This symposium was able to report on this problem worldwide and present strategies which, if followed, should help to make a significant impact on reducing this all too rampant disease.

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