

Controversy over trachoma treatment



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For more on the **trachoma study in Tanzania** see *New Engl J Med* 2008; **358**: 1870–71; DOI:10.1056/NEJMc0706263

For more on the **WHO SAFE strategy for global trachoma elimination** see http://www.who.int/blindness/causes/trachoma_documents/en/index.html

For more on the **International Trachoma Initiative** see <http://www.trachoma.org/>

Leading researchers are calling for a review of the way trachoma is treated. Anthony Solomon and colleagues from the London School of Hygiene and Tropical Medicine (LSHTM; London, UK) suggest that one or two rounds of antibiotic treatment may be sufficient to eliminate trachoma infection in some situations. This contrasts with current WHO recommendations, which advise 3 years of annual mass azithromycin treatment in affected populations before reassessment.

Trachoma is the leading infectious cause of blindness worldwide: 150 million people have active infection which, if left untreated, can lead to scarring and irreversible sight loss. The current policy for elimination—SAFE (surgery for trachomatous trichiasis, antibiotics for *Chlamydia trachomatis*, facial cleanliness, and environmental

improvement)—has achieved much success: Ibrahim Jabr, President of the International Trachoma Initiative (New York, USA) stressed that Morocco has reached the trachoma elimination goals and is awaiting WHO certification. "Other countries—Ghana, Vietnam, Gambia, and Mauritius will reach the same goal by 2010", he said.

The LSHTM challenge stems from the findings of a 5-year study in Kahe Mpya, Tanzania, where overall prevalence of trachoma in the population was just under 10%. In accordance with WHO policy, Solomon and colleagues treated 97.6% of the entire population with a single dose of azithromycin, cutting the prevalence of ocular *C trachomatis* infection, which causes trachoma, from 9.5% to 0.1% by the end of 2 years. After a second round of mass treatment, the prevalence of infection fell to zero by 60

months: "*C trachomatis* DNA was not detected in the conjunctiva of any of the 859 patients swabbed, suggesting that the infection had been eliminated from this community", said Solomon.

Jabr commented that this interesting study has broken new ground in refining how trachoma can be eliminated in specific populations with relatively low endemicity. He noted that mass drug administration in developing countries rarely achieves almost 98% coverage. "A target for most plans is more than 80% and, to my knowledge, the best achieved in any other study to date has been 93%. We cannot assume that the same results could be achieved with lower, more typical coverage rates, or in populations with a much higher trachoma prevalence", he cautioned.

Kathryn Senior

Challenges remain to new tuberculosis drugs, delegates told

For more on the **Key Issues in TB Drug Development Open Forum** see <http://www.tballiance.org/events/openforum3.php>

For more on **regulatory hurdles stalling drug trials** see *Newsdesk Lancet Infect Dis* 2008; **8**: 281

For an **analysis of the tuberculosis drug pipeline** see http://www.accessmed-msf.org/fileadmin/user_upload/diseases/tuberculosis/TBpipeline.pdf

With seven products in clinical development, the global tuberculosis drug pipeline looks richer than it has been in the past 40 years. But at a 2-day forum on tuberculosis drug development in New Delhi, India, last month (May 5–6, 2008), organised by the Global Alliance for TB Drug Development (TB Alliance) and others, WHO cautioned against premature celebrations, saying there is a long way to go before these drugs get into national programmes and to patients.

"A dual strategy making the best use of existing antituberculosis drugs alongside the search for new medicines is advisable", Nigor Mouzafarova, technical officer at WHO's South East Asia office (Delhi, India), told an audience of scientists, clinicians, regulators, policy makers, and community activists. She called for governments and the international community to work towards making existing drugs available to all those who need them at an affordable price,

and making sure that patients adhere to the treatment regimen.

The issues discussed at the forum reflect the urgency to develop more effective tuberculosis drugs at a time when HIV is driving the resurgence of tuberculosis and resistance to old drugs is growing. Despite WHO's caution, however, experts say there is now much excitement about new drugs currently in clinical trials, after decades where development has been at a standstill.

Two of the seven clinical candidates are at an advanced stage of testing. Particularly promising are gatifloxacin and moxifloxacin, Ann Ginsberg (TB Alliance, NY, USA) told delegates. OFLOTUB, the EU-funded consortium of ten European and African institutions and the WHO-based Special Programme for Research and Training in Tropical Diseases, are developing gatifloxacin. Three other candidates—TMC207, OPC67683, and PA-824 are currently undergoing phase II trials and LL 3858 and SQ 109 phase I.

But crucial challenges remain, says WHO, particularly the prospect of getting new drugs to patients any time soon. "The current drugs in the pipeline are unlikely to be included in the next WHO Essential Medicines List, due in 2009. To make it onto the list, there has to be robust evidence of safety and appropriateness from the public-health perspective. The drugs have to be tested and proved to be effective in quite a few countries; there need to be more trials on the ground and follow-up of patients to detect cases of relapse", Mouzafarova told *TLID*. "Most national regulatory authorities and national tuberculosis control programmes are more relaxed about adopting drugs once they are included in the WHO's Essential Medicines List. We don't see the likelihood of any of the new tuberculosis drugs making it to the list before 2013."

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