goal of this xenograft was to demonstrate suturability and short-term (1-week) mechanical stability under arterial pressure, but not blood compatibility. As mentioned in the article, 50% of the first six human TEBVs implanted were still functional after 7 days, which, when put in context, is quite an accomplishment. What were described as "blood leaks" were likely artifacts resulting from the aggressive anticoagulation protocol necessary in this setting. Although we could have seeded an autologous (canine) endothelium to increase the xenograft survival rate, we decided against it because the results would not have been relevant to the clinical setting, where, of course, only endothelialized autologous human TEBVs will be grafted. Our rationale appears to be supported by the paper by Niklason *et al.*, where a synthetic biodegradable graft seeded with bovine smooth muscle cells and lined with a porcine endothelium was implanted in a porcine model. The hybrid graft remained functional for 4 weeks, but the xenogeneic tissue was visibly rejected. Considering the different objectives, it seems inappropriate to compare graft longevity observed in the study by Niklason *et al.* with the longevity we observed.

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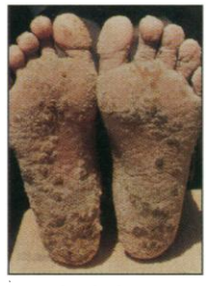
Testing of Water for Arsenic in Bangladesh

The discovery of arsenic in drinking water in Bangladesh has been described as "the biggest mass poisoning in history" (*1*). More than 80% of the population in the country now have access to drinking water supplied from hand-pumps dug over the previous two decades, and the discovery of arsenic in such water has dealt a direct blow to this "success story," threatening the lives of millions of Bangladeshis. Two challenges confront the government and other development agencies working in the country: testing the water supplied by hand-pumps for arsenic and identifying an effective, affordable, and sustainable mitigation procedure.



Arsenic victim

The testing of water supplied by hand-pumps, of which there are more than 2.5 million, is itself a formidable job. BRAC, a local nongovernmental organization, has tested a method for large-scale, field-level arsenic testing by training village-based community health workers (CHWs) (*2*) using a field kit. The kit, developed by the Asian Arsenic Network of Japan, determines the presence of arsenic in water through chemical reactions and works in the following manner: in groundwater, arsenic usually occurs as arsenite (As-III) and arsenate (As-V), and the kit reduces arsenate to arsenite by potassium iodide (KI) and stannous chloride ($SnCl_2$). The As-III is then reacted with zinc and hydrochloric acid (HCl) to produce arsenic gas. A color change from light-yellow to reddish-brown on bromide paper indicates the presence of arsenic in the water. Forty CHWs in a subdistrict previously known to be arsenic-affected were trained to use the kit. They then tested water from all 11,954 hand-pumps in 156 villages. Results showed that water from 93% of the hand-pumps was contaminated. A subsample of the water samples simultaneously tested in a government laboratory using a spectrophotometer confirmed the field testing in 92% of the cases. The cost of the testing was less than 50 cents per water sample, which is only a fraction of what it costs in a laboratory. This mass testing at the field level also aroused enormous awareness among the villagers about the arsenic problem. On the basis of this experience, BRAC is now working with the government and UNICEF to test the water supplied by all the 18,000 hand-pumps installed in the country in 1998.

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Limits of Scientific Growth

As one of the organizers of the International Forum of Young Scientists (a satellite of the World Congress of Science on 23 and 24 June in Budapest, Hungary), I hear more and more complaints from fellow researchers from all over the world about the increasing fragmentation of scientific knowledge. There is only a limited effort to achieve the appropriate balance between the discovery of new facts and finding their proper place and importance in the framework of science (*1*). Science itself is not self-integrating, and there are fewer and fewer people taking responsibility for "net-

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