Global Update

News in Brief

Polio pulse

A change in strategy in the polio program in Uttar Pradesh has borne good fruit this year. In 2007 there have been no cases of type 1 polio reported from the worst hit districts in UP. An aggressive war-like game plan against the type 1 strain using the monovalent vaccine has virtually wiped out type 1 virus from the notorious and hard to conquer UP. A relative rise in type 3 virus is being shrugged off by officials as a natural outfall which will be tackled next. Last year 96% of India's cases were due to the Type 1 virus. Type 3 is a mild virus which paralyses 1 in every 1000 children it infects, while type 1 has the potential to paralyze 1 in 200 children it infects. Type 3 also is not much of a traveler and restricts itself to local areas while type 1 virus crosses state and country borders with impunity.

2006 was a bad year. There were a total of 676 cases in India, a ten fold rise over 2005. Countries like Myanmar which had not seen the virus for 7 years had resurgence due to the Indian strain and Angola and Nigeria were also reinfected with the Indian strain. This year we have reported 103 cases in the first 6 months as against 150 for the same period last year. Type 1 cases have dropped to 39 cases *vis-a-vis* 145 in 2006. Total focus in the final lap will win this game for us. (Scientific American; 18 June 2007)

Deep breath for lung transplants

It has often baffled scientist's why lung transplants don't work so well as renal or cardiac transplants. A kidney transplant has an 80% success rate and cardiac and liver transplants are not far behind with 70%. Often a lung transplant is the only solution when you have a bad disease like cystic fibrosis, interstitial fibrosis or congenital lung anomalies. But transplant medicine's laggard, the lung, clocks a success rate of a mere 45% even in the US. The hypothesis which is gaining currency in recent years is that the lung is exposed to a constant barrage of various viruses and bacteria. These recurrent infections trigger off a chronic rejection process. It is fascinating to know that the rejection process is mediated by different cells in different organs. For a deeper understanding of the rejection process you need a physiological animal model to experiment with. And here the humble mouse is man's best teacher. This is because the genes of the mouse are very well understood and can be manipulated with great élan.

In a major breakthough, a post doctoral fellow Mikio Okazaki, of Washington University has now developed a physiological mouse model and has transplanted hundreds of mice lungs. This literally throws open the doors of success in human lung transplant (American Journal of Transplantation June 2007; Medical News Today, 15 July 2007).

Gouri Rao Passi,
Consultant, Department of Pediatrics,
Choithram Hospital & Research Center,
Indore,
India.
E-mail: gouripassi@hotmail.com