You've Come a Long Way, Babies

For positive infants today, HIV treatment offers plenty of growth opportunities.

January 1, 2008 By Rachel Rabkin Pechman

A South African study presented at the 2007 International AIDS Society Conference in Sydney found that giving HIV meds to positive infants within their first six to 12 weeks of life—before they show HIV symptoms—improves their survival rate by a whopping 75 percent. Sadly, this may not have immediate results for most of the 2.3 million HIV-positive babies born globally—many have no access to HIV meds at all and still die very early in life. But in the United States the study reflects a trend that's long been advancing.

In this country, babies born with HIV are already a vanishing breed. Better meds, standardized HIV testing and safer delivery practices have helped lower U.S. mother-to-child transmission rates from more than 25 percent in the early 1990s to between 1 and 2 percent now. Those statistics even include women who don't comply with the recommended treatments during pregnancy. "If a woman is diagnosed early enough in pregnancy, is able to take the medications as prescribed, and her viral load is undetectable, then transmission is even less than 1 percent," says ob/gyn Rodney L. Wright, MD, director of women's HIV programs at Montefiore Medical Center in the Bronx, New York. And the 100 to 200 American babies still coming into the world with HIV each year—to mothers who either didn't get tested until late in pregnancy or didn't receive preventive treatment—have a better shot at healthy lives too.

The first step for all the babies is, of course, diagnosis. HIV antibody testing isn't helpful because mom passes her antibodies to her infant; before the child hits 18 months of age, a positive test might detect the mom's antibodies—not the baby's. The CDC recommends that infants born to positive mothers get DNA PCR testing—a blood test that shows whether or not the virus itself is present. At Harlem Hospital in New York City the tests are performed at birth, at 2 weeks, 1 month, 2 months and 4 months.

Despite the South African study results, there is no U.S. protocol on when to start meds for an asymptomatic baby with normal immune function (in infants, that's measured by CD4 percentage, not count). "If an HIV-positive infant is well," says pediatrician Lisa-Gaye Robinson, MD, of Harlem Hospital, "the doctor would probably recommend starting medication right away. But the decision is up to the mother, too." While the South African study suggests that immediate HIV treatment is best for surviving infancy, it's also possible that close monitoring of infant health might produce similar results. And whether starting meds immediately will make a difference in long-term health

of positive U.S. kids won’t be known for years.

Once a positive diagnosis is made, if both mom and her doctor decide to start the baby on meds, it’s time to choose an HIV combo. “Not all adult HIV drugs are available in liquid formulation,” says Robinson, “so drug options are fewer for children, but we do have choices.” Moreover, dosages of some drugs have not yet been established for babies 2 months and younger; infants this young metabolize drugs differently than older children do. It gets easier once the babies crawl toward 6 months: For them, research has determined appropriate doses for most of the drugs available as liquids. Doses need to be adjusted again as the babies grow and their weight increases.

Looking beyond those early years, it’s clear that kids who get consistent care can grow up to live long lives. Just look at the HIV-positive children born in this country 10 to 15 years ago (when mother-to-child transmission was more common) who’ve been on HIV meds for their whole lives. “These kids are overall medically well if they adhere to their regimens,” says Robinson. The next growth spurt should be getting meds to all the world’s positive babies.
