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Single, fractional dose of polio vaccine induces priming

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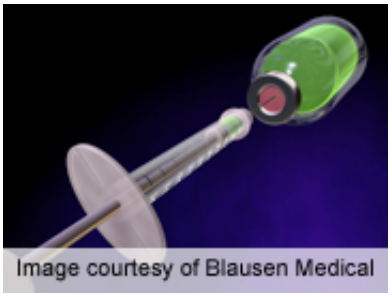

Priming immune responses are induced in most infants after vaccination with a single dose of inactivated poliovirus vaccine, according to a study published in the Jan. 31 issue of the *New England Journal of Medicine*.

(HealthDay)—Priming immune responses are induced in most infants after vaccination with a single dose of inactivated poliovirus vaccine (IPV), according to a study published in the Jan. 31 issue of the *New England Journal of Medicine*.

Sonia Resik, M.D., Ph.D., from the Pedro Kouri Institute in Havana, and colleagues assessed the extent of priming immune responses after the administration of IPV in a cohort of 310 Cuban infants who were randomized to receive a fractional dose of IPV (one-fifth of a full dose) or a full dose administered at the ages of 4 and 8 months.

The researchers found that seroconversion to poliovirus types 1, 2, and 3

occurred in 16.6, 47.1, and 14.7 percent of infants, respectively, in the group receiving the first fractional dose of IPV, compared with 46.6, 62.8, and 32.0 percent, respectively, of those receiving the first full IPV dose (P immune response occurred in 90.8, 94.0, and 89.6 percent of infants, respectively, as compared with 97.6, 98.3, and 98.1 percent, respectively, of those receiving the full dose (P = 0.01 for the comparison with poliovirus type 3). Cumulative two-dose seroconversion occurred in 93.6, 98.1, and 93.0 percent of infants, respectively, after administration of the second dose of IPV in the group receiving fractional doses, compared with 100.0, 100.0, and 99.4 percent, respectively, in those receiving the full dose (P

"Vaccinating infants with a single fractional dose of IPV can induce priming and seroconversion in more than 90 percent of immunized infants," the authors write.

More information: Full Text (subscription or payment may be required)

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