

hemolysis(3-5). Magnetic resonance imaging or UV spectroscopy for cellular extracts and enzyme assay are confirmatory. No specific treatment is available.

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## Polio Declining but AFP on the Rise

The number of polio cases in the country has shown a decline but there has been a sharp rise in AFP (Acute Flaccid Paralysis) cases as is evident from non polio AFP rates (*Table 1*) (1). A sensitive surveillance system detects a rate of 1 per 1 lakh children less than 15 years old. Non polio AFP rate in India has exceeded 5 while that in Bihar and UP have touched figures of 10.9 and 11.2 respectively(1). Values exceeding one need introspection and careful evaluation.

Prodromal infections or vaccines in several reports have been found to be temporally followed by a new onset of autoimmune diseases. This has been accepted for diphtheria and tetanus toxoid, polio and

measles vaccines and GBS (Guillain Barre Syndrome)(2).

Several studies have been conducted on GBS or its relation with nation wide oral polio vaccination. Results have demonstrated a temporal association between polio virus infection caused by either wild virus or live attenuated vaccine, and an episode of increased occurrence of GBS. However,

**TABLE I—Trend of Non-polio AFP Rate in India.**

Year	Non-polio AFP rate (per 1 lakh children < 15 years )
2001	1.88
2002	1.87
2003	1.97
2004	3.11
2005	5.06

they cannot prove the suspected cause-effect relation between GBS and OPV administration(3,4).

Molecular characterization of polio virus isolated from paralysis cases of GBS, transverse myelitis and facial paralysis have confirmed the vaccine origin of the strain and demonstrated mutation known to increase neurovirulence. This suggests that the Sabin-vaccine-derived poliovirus strains could also trigger such diseases(5).

Increase in non-polio AFP rates thus mandates exploring the causes of such cases as this might have perplexing implications for immunization program.

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