

# AN AUDIT ON INFLUENZA RELATED COMPLICATIONS

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## **OBJECTIVE**

To describe characteristics, treatment, and outcome of seriously ill children with influenza

## **DESIGN, SETTING AND METHOD**

Retrospective data were collected from case notes from 09/2011 to 03/2013 at ward 22, Provincial General Hospital Badulla, of children satisfying the case definition (high fever, WBC < 6 x 10<sup>9</sup> /L, platelets < 150 x 10<sup>9</sup> /L, negative dengue antibodies and/or antigens). Influenza screening was done in all by real time reverse transcriptase PCR on nasopharyngeal swab (NPS).

## **RESULTS**

Of 155 patients audited, 58 (37.4%) had positive NPS with Influenza A in 5.1% and Influenza B in 32.2%. Thirteen children developed encephalopathy. All 13 had positive NPA (A=01, B=12). This came up to 22.4% of the 58 NPA positives. Out of this 13, three had acute necrotizing encephalitis (ANE), one was positive for H1N1 and two were positive for Influenza B. Three had autonomic involvement with one fatality. Rest recovered without sequelae. Eleven developed encephalopathy on day 3-5 and 2 developed after day 7 of illness. Refractory convulsions developed in all 3 ANE children while 10 developed short lasting generalized convulsion. EEG favoured encephalopathy and CT showed cerebral oedema in all 13 children. Lumbar puncture performed once platelet count was normal, were negative.

Methyl prednisolone and IV immunoglobulin were commenced in 13 children with encephalopathy. Among the 45 children who received early Oseltamivir on day 1-3 of illness, only 2 developed encephalopathy and they recovered fully, Forty three recovered without any complications.

## **CONCLUSION**

The influenza related illnesses had a wide spectrum of clinical outcomes ranging from mild encephalopathy to fatal autonomic involvement and devastating ANE. Majority of encephalopathy were caused by Influenza B.