

Clinical Spectrum of Category 'C' Swine Flu in Indian Children

We read with interest the article by Das, *et al.* [1]. The article has lucidly elaborated the clinical profile of confirmed swine flu positive cases. However, authors state that the data might not be representative of the cases who were not tested for swine flu [1]. We share our data of children presenting as category 'C' cases collected retrospectively from August to December 2009 [2]. Category 'C' is defined by the presence of fever and cough/ sore throat and one or more of the following: (1) breathlessness, chest pain, drowsiness, hypotension, hemoptysis, cyanosis; (2) a severe disease as manifested by the red flag signs; and (3) worsening of underlying chronic conditions. These children were therefore tested and treated for swine flu according to MoHFW guidelines [2].

Ours is a tertiary care referral teaching hospital in north India which caters to low-middle income groups. During the outbreak, patients of all age groups with suspected swine flu were treated in a 'hybrid unit'. A total of 2,335 patients attended the hybrid swine flu OPD services, of which 530 were children. Seventy three (13.7%) children were categorized as Category 'C'. Thirty eight (52%) children were between 5–12 years, and 35 (48%) were <5 years age. History of contact with a confirmed case of swine flu or residence where there are one or more confirmed swine flu cases [2], was present in 18 (25%) of the children. Fever, cough, breathlessness and nasal catarrh/ sore throat were predominant complaints (**Table I**). Nasopharyngeal swabs of all 73 patients were collected by a microbiologist and tested with real-time reverse transcriptase polymerase chain reaction assay. All children

received antiviral therapy (oseltamivir) [2]. Of category C children, 27 (37%) were positive for 2009 Novel H1N1-virus. Most common symptoms were fever and cough similar to the study by Das *et al.* [1]. Of all category C children, there were 3 (4.1%) deaths. All 3 children developed acute respiratory distress syndrome and died within 5 days of hospitalization. Two of them had comorbid conditions—one was a known case of epilepsy but seizure free for past 1 year, and other had pulmonary tuberculosis and was on anti-tubercular therapy under DOTS. All 3 deaths reported by Das, *et al.* [1] also suffered from underlying chronic diseases.

A high index of suspicion should be kept as the features of swine flu are nonspecific. Underlying comorbidities might increase chances of death, hence such patients should be closely monitored.

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Cervical Spine Injury - A Rare Cause of Torticollis

A 9-month-old male child had a fall on his head from a height of 4 feet when he was being carried in arms by the elder sibling. The child developed tilt of his head to left and resisted any attempts to passively correct the tilt. The child did not have any other injury and there was no

neurological deficit. Radiographs of the cervical spine showed fracture of lamina at C2 level. The child was given a Minerva jacket plaster for 3 weeks. When the plaster was removed at the end of 3 weeks, the child could freely move his head and neck without any tilt and had no tenderness in the cervical spine. The follow-up radiographs showed healing of fracture.

Congenital torticollis is the commonest cause of torticollis in children. It is caused by injury to