sugar was high and negative once blood sugar normalized. Child was receiving oseltamivir only during the illness.

It is thought that influenza causes an increase in IL-6 levels which may lead to increased cortisol levels, followed by a pronounced dose-dependent increase in blood glucose. It is also postulated that systemic hypercytokinemia in influenza causes hyperglycemia and that the glucose levels reflect the degree of pathogenicity(2). Literature search revealed hyperglycemia as a complication associated with higher mortality in H5N1 cases(2) and in few critically ill children with influenza encephalopathy(3). Another speculation was whether the hyperglycemia was related to administration of oseltamivir, a complication of this drug, hitherto undescribed. However, only rare aggravation of pre-existing diabetes has been described with oseltamivir(4), and not transient hyperglycemia.

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Antisnake Venom in a Neonate with Snake bite

We read with interest the case report by Jindal, *et al*.(1) describing the management of a 27 day old neonate with snakebite envenomation. Surprisingly, there is no mention of ptosis in this case report of severe neurotoxic ophitoxemia. The dose of 50 vials (500 mL) of ASV used will neutralize 300mg of cobra venom and 225mg of krait venom which is well beyond the capability of each snake to achieve in a bite. This is a clear case of unnecessary overuse of ASV. The endpoint of ASV administration is where the dose is sufficient to neutralize any unbound venom. Keeping the reversal of respiratory and neuromuscular paralysis as the end point and pumping in ASV to achieve it as done in this case is definitely not rational. Twenty vials is the maximum that can be given to a patient with neurotoxic snakebite envenomation. Larger doses of ASV over prolonged duration have no benefit in reversing envenomation(2,3). ASV dose has nothing to do with body size but only the amount of venom injected. There is no good evidence to suggest children should receive either more ASV because of body mass or less in order to avoid adverse reactions(4). In summary, this case study can mislead peripheral doctors on the dose of ASV.

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REPLY

The dose of ASV to be used in a neonatal snake bite

has not been documented in literature and remains open to further research. There have been reports of use of high doses of ASV in literature in older age groups(1). Existing guidelines are silent on the dosing schedule of ASV in neonates(2). Taking these facts into consideration, we preferred to continue with ASV dosing beyond 25 vials encouraged by a definite clinical response in the form of improving respiratory and neuromuscular paralysis. The objective of this case report is to share our experience of treating a neonate with snake bite at a tertiary care centre and suggest possibility of further research in this area and not to mislead the peripheral doctors.

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ASV in a Neonate

I would like to make a few comments regarding a recent article(1). The current recommendation for neurotoxic envenomation irrespective of age is to administer an initial dose of 10 vials of ASV over one hour. A trial of neostigmine is then given and the child is monitored. A second and final dose of 10 vials of ASV is administered 1-2 hours later if there is no improvement or worsening of symptoms(2,3). There is no justification for using 50 vials. I would also like to highlight the fact that the first dose of 10 vials of ASV is preferably given over 1 hour. There is no benefit in administering each dose over a longer period.

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REPLY

Though ASV was given as initial dose of 5 vials over 1 hour, it was repeated after 1 hour, again as an infusion over a period of 1 hour. We understand that ideal would have been to administer 8-10 vials as the initial dose but it was not feasible in our case due to some time spent in procurement of ASV.

Secondly, the maximum permissible dose of ASV to be given in a patient with neurotoxic snake bite is a definite area of controversy. There have been reports in literature depicting benefits of using much higher doses of ASV than 20 vials(1). Most of the studies quote end point of ASV as reversal of respiratory and neuromuscular paralysis. There has been no published case report of a neonate treated with ASV.

In our case, we were guided by the definite response to ASV in the terms of improving respiratory and neuromuscular paralysis even above the ceiling dose of 25 vials. We were hesitant to continue administering ASV after 25 vials of ASV and stopped intermittently but switched over to continue further doses in view of a good clinical response to ASV.

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