

stered lignocaine (1 mg/kg) or phenytoin sodium (3.5 mg/kg over 5 minutes) can be used. Convulsions are rare, as in our case, and require higher doses of phenytoin. Anti digoxin antibody fragments (Fab) to the drug (digibind) is highly effective and is used in severe toxicity, especially if no response is noted to antiarrhythmic agents(7). However, digibind is expensive and is not routinely available to us.

In conclusion, double checking of drug dose calculations should be practised, close monitoring and prompt correction of metabolic and ECG abnormalities while withholding the drug is sufficient in early cases. Whereas phenytoin sodium is effective in correcting the arrhythmia in most patients, digibind may be required in more severe cases.

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Nifedipine in Urticaria

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The efficacy of nifedipine, a calcium channel antagonist in the treatment of chronic idiopathic urticaria in adults is documented(1,2). This study was done to assess the efficacy and safety of nifedipine in children with giant urticaria and angioneurotic edema.

Subjects and Methods

Six children with giant urticaria and 2 children with angioneurotic edema were the subjects for this study. An informed oral consent was obtained from the parents/guardians of the child. A 5 mg, capsule of nifedipine was punctured with a needle and approximately half of its con-

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TABLE I—Summary of Cases

S. No.	Age (yrs)	Diagnosis	Relief in		Time Needed (min)	Change with sublingual nifedipine							
			Red-ness	Swelling		Temp (F)		Pulse		R.R		B. P. (mm Hg)	
						B	A	B	A	B	A	B	A
1.	4	G.U.	Less	Less	60	N	N	110	110	28	28	106/50	106/50
2.	6	G.U.	Less	Less	30	101	102	152	168	24	24	120/40	90/40
3.	1	G.U.	Less	Less	30	No Change							
4.	1	G.U.	Less	Less	30	No Change							
5.	1	G.U.	Less	Less	30	No Change							
6.	10	G.U.	Less	Less	10	No Change							
7.	7	A.E.	Less	Less	30	No Change							
8.	6	A.E.	Less	Less	30	No Change							

G.U. = Giant urticaria; A.E. = Angioneurotic edema; R.R. = Respiratory rate; B = before, A = After.

tents (about 2.5 mg) were applied to the tongue of the child, drop by drop over a few minutes. All children were monitored for half an hour in the clinic. Thereafter 2.5 mg of oral nifedipine was prescribed three times daily. Children were examined daily till they had relief.

Results

The swelling and redness significantly reduced in 30 minutes in all the cases. (Table). None had hypotension, tachycardia, headache or giddiness. A six-year old child who also had upper respiratory infection and 101°F fever had a blood pressure of 120/40 mm Hg. After giving nifedipine it reduced to 90/40 mm Hg. All children were fully cured in three days.

Discussion

Nifedipine safely reduced the swelling and the redness in the giant urticaria and angioneurotic edema in less than 30 minutes in children. No adverse effects were

documented in any case. The conventional injection adrenaline dramatically relieves angioneurotic edema and giant urticaria. However, sublingual nifedipine acts equally fast, needs no sterile syringe and saves the child from the pains of an injection and other side effects of adrenaline like tachycardia, tremors, etc. Sublingual nifedipine could conceivably replace injection adrenaline as drug of choice for this indication. However, further studies of a similar nature are desirable.

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