#### CORRESPONDENCE

# Bee Sting in Mother and Urticarial Rash in Her Baby

A 12-day-old female infant was admitted with complaints of redness covering the whole body. In history, the mother had been stung on the lip by a bee 4 hours earlier. Swelling and pain subsequently developed in the mother's upper lip and cheek. No treatment other than ice compression was applied. The area on the lip stung by the bee could be seen, but the sting itself could not be identified. Approximately 1 hour afterward, the infant was breastfed by the mother, following which a widespread urticarial rash was observed over the whole body of the infant. Mother and baby had consumed no allergenic food or medications and had not been exposed to any allergens. It proved technically impossible to test the breast milk for IgE against wasp venom. Subsequently, 1/5 saline solution of 150 mL/kg (dextrose monohydrate + sodium chloride) and single dose dexamethasone (1 mg/kg) was administered intravenously. The rash started to disappear within the first 30 minutes and had completely resolved 2 hours later. Formula food was recommended instead of breastfeeding for the next 12 hours. The infant was discharged with full recovery.

Breastmilk contains dietary antigens [1]. Maternal antigen exposure affects antigen presence in breast milk [2]. This can be important for neonates as antigen handling in the infant gut may be impaired due to their higher gastric pH and lower secretion of pancreatic

enzymes [3]. Various levels of antigen can be found in breastmilk, depending on maternal antigen exposure and mammary gland permeability [4].

Our 12-day-old patient was breastfeed after her mother was stung by a bee. After breastfeeding, urticarial rash developed over her whole body. We think that the mother was sensitized to wasp venom and that the specific IgE may have been transferred to the child during birth. The rashes resolved following the administration of dexamethasone. In the case of allergic reactions in children of breastfeeding mothers, we recommend that food intake, medications taken and exposure to any allergens in the mother be enquired into.

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#### REFERENCES

- Palmer DJ, Makrides M. Diet of lactating women and allergic reactions in their infants. Curr Opin Clin Nutr Metab Care. 2006;9:284-8.
- Palmer DJ, Gold MS, Makrides M. Effect of cooked and raw egg consumption on ovalbumin content of human milk: a randomized, double-blind, cross-over trial. Clin Exp Allergy. 2005;35:173-8.
- 3. Agunod M, Yamaguchi N, Lopez R, Luhby AL, Glass GB. Correlative study of hydrochloric acid, pepsin, and intrinsic factor secretion in newborns and infants. Am J Dig Dis. 1969;14:400-14.
- 4. Verhasselt V. Neonatal tolerance under breastfeeding influence. Curr Opin Immunol. 2010;22:623-30.

## Tachycardia-Induced Cardiomyopathy Presenting with Cardiogenic Shock

We describe a 6 year-old boy who was admitted in the pediatric intensive care unit in cardiogenic shock due to incessant supraventricular tachycardia (SVT) (*Fig.* 1) Examination revealed poor skin perfusion in a pale, lethargic boy with elevated heart rate of 180 beats per minute with a 3-day history of palpitations, fatigue and poor feeding. His past medical history included an

episode of paroxysmal SVT after a viral infection at 3 years of age which was successfully managed with amiodarone, propaphenone and propranolol. Initial resuscitation required rapid fluid administration, inotropic support and mechanical ventilation. Initial chest radiography showed cardiomegaly and pulmonary venous congestion. Troponin levels were elevated at 0,76 ngD L. Transthoracic echocardiography revealed a dilated left ventricle with hypokinesia, markedly reduced left ventricular ejection fraction (LVEF) around 26% without any congenital cardiac defects. The patient rapidly developed multiorgan failure. Acute myocarditis was excluded due to absence of abnormal T wave



**FIG. 1** *ECG* at presentation indicative of paroxysmal supraventricular tachycardia.

inversion and high serum CK level. Blood and peripheral culture(s) together with serology, were negative. There was no histological evidence of inflammation on biopsy. The patient was gradually weaned off inotropic support and mechanical ventilation, while antiarrhythmic medication with amiodarone with digoxin propranolol was initiated due to rhythm disturbances. Ventricular function improved gradually and myocardial biopsy after cardiac catheterization revealed dilated cardiomyopathy, without histological evidence of inflammation. At one year follow-up the patient remains asymptomatic with normal left ventricular size on echocardiography and a LVEF of 67%, confirming the diagnosis of tachycardia induced cardiomyopathy.

SVT is the most children, In common tachyarrhythmia. When SVT is incessant, it can lead to tachycardia induced cardiomyopathy which presents as heart failure [1]. The condition is characterized by significant cardiac enlargement, reduced ventricular wall thickness, and impaired ventricular contraction that resembles to dilated cardiomyopathy but are after control of tachyarrhythmia and management of heart failure [2,3]. A high index of suspicion is mandatory for the diagnosis of tachycardia induced cardiomyopathy. On ECG, the arrhythmia becomes evident. Chest X-ray is also helpful but it is the echocardiogram that reveals LV and left atrial (LA) dilatation with reduced LVEF. Differential diagnosis includes other causes of reversible cardiac dysfunction such as coronary artery disease hypertension, myocarditis, alcohol, Takotsubo–stress cardiomyopathy, and sepsis. LV dimensions can be used to differentiate dilated cardiomyopathy accompanied by supraventricular tachycardia. Restoration of a normal heart rate improves LV systolic function and reverses clinical manifestations of heart failure in patients with tachycardia induced cardiomyopathy [4].

This is a rare and potentially treatable cause of acute heart failure. A high index of clinical suspicion is mandatory for prompt diagnosis and immediate initiation of treatment.

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#### REFERENCES

- Cruz FE, Cheriex EC, Smeets JL, Atie J, Peres AK, Penn OC, et al. Reversibilty of tachycardia induced cardiomyopathy after cure of incessant SVT. J Am Coll Cardiol. 1990;16:739-44.
- 2. McIaran CJ, Gersh BJ, Sugrue DD, Hammill SC, Seward JB, Holmes DR Jr, *et al.* Tachycardia induced myocardial dysfunction. A reversible phenomenon? Br Heart J. 1985;53:323-7.
- 3. Jeong YH, Choi KJ, Song JM, Hwang ES, Park KM, Nam GB, *et al.* Diagnostic approach and treatment strategy in tachycardia-induced cardiomyopathy. Clin Cardiol. 2008;31:172-8.
- 4. Lishmanov A, Chockalingam P, Senthilkumar A, Chockalingam A. Tachycardia-induced cardiomyopathy: evaluation and therapeutic options. Congest Heart Fail. 2010;16:122-6.

### Assessment of Iodine in Salt Samples at Retail Trader and Household Levels

Chudasama, *et al.* [1] have mentioned the taluka specific assessment of iodine in salt samples by spot kit at retail trader level. Have the authors combined 840 samples collected from household with those obtained from the

retail shop? If yes, how can the household sample be labelled as the retail trader level sample as method of storage can affect content of iodine. Moreover, the total number of salt samples tested comes to 672, while iodization of salt >15ppm has been mentioned as 775.

In a survey conducted at GMCH, Chandigarh, 1849 school children (6-12years) were studied from 10 schools. Every child was asked to bring the household salt sample. All the samples had > 5 ppm iodine level and 71.8% of salt sample had adequate iodine content of >15