tion in platelet count of  $100 \times 10^{9}$ /l, serum potassium rose by 0.11 mmol/l [1]. One of the patients with thrombocytosis studied had Kawasaki disease.

## References

- Robson WLM, Kabani AM, Leung AKC, Fick GH, McKenna AI (1992) The relationship of the serum potassium to the platelet count in children. Clin Pediatr 31:123–125
- Shimizu T, Yamashiro Y, Yabuta K (1992) Pseudohyperkalaemia in Kawasaki disease. Eur J Pediatr 151:497-498

## Reply

## T. Shimizu, Y. Yamashiro, K. Yabuta

Department of Paediatrics, Juntendo University School of Medicine, 2-1-1 Hongo, Bunkyo-ku, Tokyo, 113, Japan

Received: 23 October 1992 / Accepted: 25 October 1992

Sir: We thank Robson et al. for the additional information which showed almost the same findings as in our study  $(0.094 \text{ mEq/l} \text{ increase} \text{ in serum potassium per } 100 \times 10^{9}/\text{l} \text{ elevation of platelet count})$ . Their findings appear to support our conclusion that the pseudohyperkalaemia in Kawasaki disease is mainly due to an increased platelet mass per unit volume of blood, because there was no marked difference between their findings in patients with thrombocytosis who are not suffering from Kawasaki disease, except for one patient, and our findings in patients with Kawasaki disease.

# Hyponatraemia in "Water Babies": an underestimated problem?

### D. Grossman, T. Carvelli, H. Hainaut, J. P. Bourguignon

Clinique de l'Espérance, 4420 Montegnée Département de Pédiatrie, University of Liege, Belgium

Received: 23 June 1992 / Accepted: 20 October 1992

Sir: A 4-year-old boy was recently admitted to the emergency room who had been previously healthy. He was dazed, had generalized seizures and was given 10 mg diazepam rectally.

Three hours before admission, he had taken his second swimming lesson during which he had been submerged several times. He reportedly had been swallowing a lot of water but no signs of respiratory distress had been observed. The submersions were not accidental since they are part of that specific teaching method. Already at the swimming pool, emesis and diarrhoea were noted. Subsequently, at home, diarrhoea and vomiting continued. Finally, the boy had seizures of all limbs.

On admission, physical examination was normal except for the neurological abnormalities and crackles at the basis of the right lung. Body temperature was 36°C. Laboratory investigations revealed a serum sodium of 110 meq/l. A second sample confirmed the low sodium and serum osmolality was 258 mosm/kg water. Chest X-ray showed no infiltration suggestive of aspiration. The electroencephalogram showed diffuse, irritative alterations.

-	<b>D</b> 1	1.1				c.			1
l'ania i	Patients	with	water	intos	71C2110T	atter	а.	swimming	lesson
LUDIC LI	1 auomo	WILLI	water	moz	incauon.	ancer	u	o winning	100000

	Age								
	4 years	5 months	10 months	6 months	11 months				
Vomiting	+	+	+	+	+				
Diarrhoea	+	NR	NR	NR	NR				
Polyuria	NR	NR	+	NR	+				
Lethargy	+	+	+	+	+				
Hypothermia	+	+	NR	NR	+				
Seizures	+	+	+	+	+				
Initial serum sodium (meq/l)	110	118	123	118	122				
Initial osmolality (mosm/l)	258	252	252	NR	NR				
References	а	[5]	[4]	[3]	[1]				

NR, Not reported

<sup>a</sup> Personal case

A diagnosis of water intoxication was made.

Treatment consisted of fluid restriction, furosemide, dexamethasone, mannitol, phenobarbital and antibiotics.

Seizure activity disappeared within minutes, serum sodium concentration returned to normal within 9 h and the patient recovered quickly.

Water intoxication in children has been reported in different conditions such as anti-diuretic hormone insensitivity, vigorous hydration and excessive intake of water in connection with inappropriate feeding. Here we report on excessive water intake during a swimming lesson.

In the literature, four patients have been reported with a condition similar to that of our patient [1-5]. In each case, vomiting, diarrhoea, lethargy and seizures were noted.

Serum sodium concentrations were between 118 and 123 meq/l (Table 1). The incidence of this complication of early swimming is unknown. We feel that the number of such patients might be greater than reported since swimming lessons with submersion are still in use.

We conclude that teaching to swim with forced submersion in infancy is unacceptable because of its possible life-threatening complications and the diagnosis of water intoxication should be kept in mind whenever an infant is admitted with an acute neurological disorder.

### References

- Bennett H, Wagner T, Fields A (1983) Acute hyponatremia and seizures in an infant after a swimming lesson. Pediatrics 72:125–127
- Flynn T, Kennell J, McLeod R, Shaffer T, Strong W, Thornton M, Van Rooy C (1980) Swimming instructions for infants. Pediatrics 65:847
  Geda M (1982) "Water babies" intoxication. Tex Med 78:6
- 4. Goldberg G, Lightner E, Morgan W, Kemmerling S (1982) Infantile water intoxication after a swimming lesson. Pediatrics 70:599–600
- Kropp R, Schwarz J (1982) Water intoxication from swimming. J Pediatr 101:947-951