Hypoalbuminemia in the absence of hepatic, renal, and nutritional deficiency may indicate protein malabsorption or protein losing gastroenteropathy. Abuse of laxatives like castor oil can cause protein losing gastroenteropathy(l). Castor oil is hydrolyzed in the intestine by pancreatic lipase to glycerol and ricinoleic acid. Ricinoleic acid acts as a mild irritant and causes purgation. It is also known to interfere with absorption of proteins, resulting in protein losing enteropathy(2).

In the quest for achieving universal breast feeding, it is essential to provide health education to mothers and disuade them from administering harmful substances to children. D.G. Jayaprakash, T.S. Raghu Raman, D. Singh, L.N. Raja,

Department of Pediatrics, Command Hospital (A.F.), Bangalore, and Armed Forces Medical College, Pune.

## REFERENCES

- Clark F. Disorders of metabolism II. *In:* Textbook of Adverse Drug Reactions, 2nd edn. Ed. Davies DM. New York, Oxford University Press, 1981, pp 330-377.
- Satuskar RS. Pharmacology and Pharmacotherapeutics, 11th edn. Bombay, Popular Prakashan, 1989, pp 504-512.

## **Nevus Flammeus in Tuberous Sclerosis**

Nearly 90% of the patients with tuberous sclerosis have skin involvement in the form of hypopigmented macules (ash leaf macules), adenoma sebaceum, shagreen patch, subungal and/or periungal fibromas, cafe au-lait spots, forehead fibrous plaques and facial angiofibromas(l). We report a case of tuberous sclerosis with nevus flammeus, an hitherto unreported association.

A 10-month-old boy, born of a nonconsanguineous marriage was brought with multiple episodes of generalised tonic-clonic convulsions, which started

as left partial seizures at 7 months of age. On examination the child had normal anthropometric measurements, vital parameters and milestones. He had a nevus flammeus in the right submandibular region, 6 cm by 4 cm macular reddish brown patch with irregular margins (Fig. 1). There were no other skin lesions of tuberous sclerosis. There were no focal neurological deficits. Systemic examination was within normal limits. CT scan of the brain revealed multiple hyperdense lesions (50-150 HU) in the paraventricular wall of the left frontal horn, body of right lateral ventricle and in deep parietal cerebral hemisphere with contrast enhancement. Fundus examination revealed bilateral multiple astrocytomas. The CT scan of the abdomen showed multiple



hypodense lesions involving the right renal cortex and single lesion in the left renal cortex. 2-D echocardiogram and ECG were within normal limits. A diagnosis of tuberous sclerosis was made(1).

Nevus flammeus consist of mature dilated dermal capillaries and represent a permanent developmental defect. Lesions are macular, sharply circumscribed, pink to purple in colour with varing size, involving upto one-half of the body. Posterior surface of neck is the common site (unna nevus). Nevus

flammeus has been associated with Sturge-Weber syndrome and Klippel-Trenaunay-Weber syndrome in high frequencies; and in with Rubinstein Taybi, Cobb, Roberts syndrome, Weyburn Manson syndrome, Beckwith-Wiedemann and 13 trisomy syndrome in moderate frequencies(2,3).

Our patient showed features of tuberous sclerosis in association with nevus flammeus. Such an association has not been described previously. However the possibility that the two conditions were unrelated, and the association incidental, cannot be excluded.

## Acknowledgement

We thank Dr. Y.N. More, Medical Superintendent, Dr. R.N. Cooper Hospital, for permitting us to publish this report.

P.N. Patnekar,
H.A. Kulkarni,
S.R. Khopkar,
V.S. Kulkarni,
R.S. Nerurkar,
Department of Pediatrics,
Dr. R.N. Cooper Hospital, Juhu,
Bombay 400 056.

## REFERENCES

- Roach ES. Neurocutarteous syndromes. Pediatr Clin N Am 1992, 39: 591-620.
- 2. Esterly NB. Vascular lesions. *In:* Nelson Textbook of Pediatrics, 14th edn. Ed. Behrman RE. Philadelphia, WB Saunders 1992, pp 1629-1633.
- 3. Pinto FJ, Bologuia JL. Disorders of hypopigmentation in children. Pediatr Clin N Am 1991, 38: 991-1018.