Infantile Hemangiomas – Role of Propranolol

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We read with interest the recent article by Akcay, *et al*. on management of infantile hemangiomas [1]. In this study out of 55 patients, 16 were started on steroid therapy out of which 2 did not respond and 3 had steroid related side effects. In another 34 patients who were followed up without therapy, only 11 regressed.

Hemangiomas even when they are not life threatening cause a lot of anguish to parents as they often occur in visible areas of the head and neck region. Intralesional steroid injections [2], interferon [3] and vincristine therapy [4] have also been used. An important drug in the armamentarium now is propranolol [5]. For the past few years we have been using oral propranolol at a dose of 0.5 – 2 mg/kg/day. In as yet unpublished data we have seen excellent results uniformly with none of the side effects associated with steroid therapy. Regression was seen to occur in all patients and occurred very early at start of therapy.

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Seizures Following Lignocaine Administration

A 2-month-old boy was brought from the operation theatre with generalized tonic clonic convulsions since 10 minutes. Baby had undergone circumcision few minutes earlier and lignocaine was the local anaesthetic agent used. On examination, he was convulsing and was able to maintain his airway. Immediately oxygen and intravenous diazepam 1 mg was given slowly under monitoring. Baby was still convulsing, another dose of diazepam 1 mg was given slowly. Baby went into respiratory depression with HR>100/min, intubated immediately and assisted ventilation was given for 3 minutes. Extubation was done after baby started having spontaneous respiration. On examination, baby was afebrile, respiratory rate 38/min, heart rate 160/min, capillary refilling time of 2 seconds, oxygen saturation of 96% at room air with normal pupillary reaction to light. Baby was drowsy, with no focal deficits and other system examination was unremarkable. He was started on intravenous fluids, cefotaxime and injection phenobarbitone. His blood counts, blood sugar, serum calcium, phosphorous, serum electrolyes, blood urea, serum creatinine, CRP and chest *X*-ray were within normal limits. ECG showed tachycardia with heart rate of 160/minute. After 20 hours, baby was conscious, active and was started on breast feeds. Baby was given maintenance dose of phenobarbitone for 48 hours and discharged after 2 days.

Lignocaine toxicity has been reported after subcutaneous administration, oral administration, and intravascular injection [1,2]. Even though toxicity due to local anesthetics is extremely rare in infants and children; seizures, dysrhythmias, cardiovascular collapse, and transient neuropathic symptoms have been reported [3-5]. Infants have a much higher free serum concentration of local anaesthetics than older children and adults, therefore they are more prone to the deleterious effects of local anesthetics [3,4]. Children have been reported to

have convulsions even with serum lignocaine concentrations within the therapeutic range of 1-5 microgram/mL [2]. However, we could not estimate the serum concentration of lignocaine in our child. The maximum safe dose of lignocaine is 3 mg/kg [1]. On questioning, we got information that about 1mL of 2% lignocaine (20mg) had been used as local anesthetic for circumcision. Our baby weight was 5.2 kg and the maximum safe dose was 15.6 mg, but he had received 20 mg. Using Naranjo scale to ascribe the side-effect of lignocaine, it was Probable adverse drug reaction.

The treatment of local anesthetic toxicity is essentially supportive. The symptoms of toxicity persist as long as the plasma concentration remains above the therapeutic index [1]. Despite apparent safety of lignocaine, extra care should be taken in young children as it is easy to overestimate the dose-to-weight ratio [1].

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Wire-aided Reintubation following Rigid Bronchoscopy: A Safe Technique?

We read with interest the case report on wire-aided reintubation following rigid bronchoscopy: a safe technique [1]. Although it is an innovative technique but not necessarily safe one, especially in neonates.Isolated experience doesn't make it safe in all the hands.Secondly, it was totally wrong and unnesessary on behalf of authors to mention that multiple traumatic attempts were done by a senior pediatrician to intubate the baby.Thirdly, authors also mention failure of steroid administration at the referring hospital but actually there was no need for giving iv steroids as child was still intubated. Only when extubation is planned, should steroids be used [2].

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Takayasu Arteritis with Hashimoto's Thyroiditis

A 12-year-old Chinese girl was admitted to our hospital with a history of fatigue and hypertension lasting for about 9 months. She also had blood pressure (right arm) of 160/90 mmHg. Free thyroxine (FT4), free triiodothyronine (FT3), and thyroid stimulating hormone (TSH) were 40.5 pmol/L (ref range 12-22 pmol/L), 12.4 pmol/L (ref range 3.1-6.8 pmol/L), and 0.20 uIU/mL (ref range 0.27-4.2 uIU/mL), respectively. The titer of thyroid peroxidase antibodies (TPOAb) and thyroglobulin antibodies (TgAb) were 68 IU/mL (negative ≤34 IU/mL) and 142 IU/mL (negative ≤115IU/mL), respectively. Thyroid ultrasonography revealed increased thyroid volume, with diffuse hypoechogenicity. ECG revealed sinus tachycardia. A diagnosis of Hashimoto's thyroiditis was made. With treatment of thiamazole, L-thyroxine and propranolol hydrochloride, her FT4, FT3, TSH were detected at 17.5 pmol/L, 4.2 pmol/L, and 3.5 uIU/mL, respectively. Subsequently, she was given levothyroxine replacement treatment to maintain thyrotropin within range; however, her blood pressure was still high.