Intralesional Corticosteroid Therapy in Hemangiomas: Clinical Outcome in 160 Cases

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Abstract
Background: Hemangiomas, one of the most common childhood neoplasms, exhibit a characteristic history of rapid proliferation and slow spontaneous involution. Most of hemangiomas are often managed conservatively, requiring numerous years for spontaneous involution. However, hemangiomas can threaten function in 10% to 20% of cases, less than 1% are truly life-threatening. All these serious hemangiomas require treatment to avoid severe sequelae and in some rare cases to save the infant’s life.

Objective: To evaluate the efficacy, side effects, and influencing factors of intralesional triamcinolone in enhancing regression of various sizes and location of hemangiomas and to discuss the optimal time and interval of the treatment.

Material and method: The retrospective study was done on 160 pediatric patients with hemangiomas, treated with intralesional triamcinolone injection from the age of 1 month to 15 years at Queen Sirikit National Institute of Child Health from March 1995 to March 2008. Data was collected from interviews, examinations, medical records, photographs and telephone conversations. Standard statistical methods were used for comparison. The hemangioma sizes were classified into 3 groups; small (>0-3 cm), medium (>3-6 cm) and large (>6-9 cm). Indications for the treatment were rapidly growing lesions, lesions with visual problems, bleeding, ulceration and cosmetic concern. Intralesional injection of triamcinolone was given in a dose of 1 to 2 mg/kg of body weight (maximum of 60 mg). The interval between the treatments varied from 4 to 12 weeks. Most patients were followed up at monthly interval at least 12 months through clinic visits. Mean follow-up was 3.6 years (range 14 months to 12 years).

Result: One hundred and sixty patients, 111 girls and 49 boys were treated with this technique. The mean age at first injection was 16.1 months, with a range from 2 months to 9 years. The number of intralesional triamcinolone injection varied from single injection to twelve injections with a mean of 5.7 injections. The overall response rate was 90% (excellent at 70% and good at 20%). Maximum response was observed in children below the age of 1 year (excellent at 77.8% and good at 15.7%) and parotid hemangiomas (excellent at 93.1% and good at 6.9%). The difference between hemangiomas sizes and treatments interval result was not of statistical significance.

Conclusion: Intralesional administration of triamcinolone was devoid of systemic side effects and an effective initial modality for rapidly growing hemangiomas.

Keywords: Hemangioma, Intralesional corticosteroid therapy, Intralesional triamcinolone injection