Oral propranolol for treating infantile hemangiomas: a case series of 57 patients


Abstract

Introduction and objectives

Infantile hemangiomas (IH) are a frequent vascular tumor. In recent years, propranolol has emerged as an alternative in the treatment of IH. The objective of the present study was to evaluate the effectiveness of propranolol for the treatment of IH.

Materials and methods

Patients with IH requiring treatment were included. Cardiologic evaluation was made to every patient and electrocardiogram (ECG) and echocardiogram were done.

Oral propranolol was started in an ambulatory way at a dose of 2 mg/kg daily divided in two doses. At ten days all the patients were evaluated with a 24-h rhythm holter.

Evaluation of effectiveness: In clinical controls and by images IH were formally analyzed, without blindness. Response was categorized as complete response (CR), partial response (PR) and no response (NR).

Adverse events: Adverse events were registered in a special category of the formulary.

Results

57 patients were included. Mean age was 9.7 months. There were 80.8% females. Mean duration of treatment was 7.3 months (1–24 months).

Efficacy: 50.6% had CR, 49.3% had PR. There were a 7% of adverse events. No differences in response rate exist according to age or location. No rhythm holter was altered at ten-day control.

Conclusion

Our study highlights the possibility of starting propranolol in an ambulatory way, establishes a dose of 2 mg/kg/day and confirms the security profile of the drug. We consider propranolol as a first line treatment for IH.

Keywords Administration, Oral, Female, Hemangioma, Capillary/*drug therapy, Humans, Infant, Male, Propranolol/*administration & dosage, Prospective Studies, Skin Neoplasms/*drug therapy