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Evaluation of Treatment Responses of Children Diagnosed with Hemangioma, A Single Center Experience

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INTRODUCTION

Hemangiomas are the most common benign tumors of childhood, arising from proliferation of vascular endothelial cells.
Its pathogenesis is poorly understood but thought to represent an aberrant response of pluripotent stem cells to stimuli such as hypoxia and the renin-angiotensin system.
Since there are different treatment regimens, evaluation of treatment responses gains importance in treatment selection.

AIM

We aimed to evaluate the treatment responses and drug side effects of our patients who were treated for hemangioma.

METHOD

The files of 77 patients with hemangioma who were followed up in our center in the last 6 months were retrospectively analyzed.
58 patients who received treatment were included in the study.
Age, gender, examination findings, cardiological evaluations, ultrasonographic results, medications and side effects of the patients were examined.
Superficial hemangioma size, color assessment and parent interpretation were used as treatment response.
Local treatment was preferred in patients with small lesions.
Propranolol treatment was started at a dose of 0.5 mg/kg and increased to 2 mg/kg at intervals of 5-7 days.

RESULTS

Of the 58 patients included in the study, 45 were female and 13 were male.
The mean age of our patients was 8.8 months (1 month-100 months).
Forty-one of the patients had a single lesion, 14 had multiple lesions, and 3 had extensive lesion with segmentation.
Of these patients, 39 are under follow-up with systemic treatment with propranolol and 19 with local treatment with timolol maleate.
The mean follow-up period of the patients' using propranolol was 7.7 months (2-24 months).
While 25 (65%) of 39 patients using propranolol had shrinkage and discoloration, 12 (30%) had almost complete healing, while 2 (5%) patients did not respond well to treatment.
The lesion shrank in 12 (63%) of 19 patients who received local treatment with timolol maleate, while the treatment did not help in 7 (37%) patients.



A 1-year-old male patient with a raised skin hemangioma on the left leg



8-year-old girl with hemangioma on her hand and arm

CONCLUSIONS

Good results were obtained with propranolol treatments in patients with infantile hemangioma.
While side effects such as hypoglycemia, hypotension, and bradycardia that can be seen under treatment were not observed, sleep disturbance and restlessness complaints developed in 3 patients.
To reduce these complaints, the evening treatment dose can be taken earlier.
Systemic treatment resulted better than local treatment.

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