

Results Of Drug Treatment Of Hemangiomas During Infancy

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Abstract: In this article, the course, clinic, distribution, modern diagnosis, stages of development, classification and modern treatment methods of skin hemangioma in different locations during breastfeeding are described, as well as the results of drug treatment. In the study, the results of medical treatment of 40 patients with hemangioma during the breastfeeding period who were treated on an outpatient basis between 2020 and 2023 were analyzed.

Keywords: Hemangioma, breastfeeding period, propranolol.

Enter. Hemangioma is a benign tumor developed from blood vessels, which is observed mainly in the first 18 months of a child's life, characterized by rapid growth and invasion of surrounding tissues. Hemangioma (GA) changes the color, consistency and shape of the tissue during the growth period, leading to various complications such as cosmetic defects and functional disorders of organs. Cutaneous GA can present with complications such as suppuration, secondary infection, and bleeding from GA. The general incidence of GA in newborns is 10-15%, of which 70% are observed in the head and neck area. 78% and 22% are observed in girls and boys, respectively. 83% of GAs located in the head region cause dysmorphophobia [4, 7, 9, 10, 11].

Cutaneous hemangiomas in the course of their development appear as a pink or bluish spot at birth in 80% of cases. It is often confused with a birthmark or postpartum cyst during this period. Later, during the first 2-3 weeks after delivery, the skin spot thickens and the size of the hemangioma increases. A high-level growth of GA is observed in 4 weeks and is manifested in the form of a red spot rising from the skin level [2, 7, 8]. GA growth develops in 5 stages: prodromal, initiation, proliferation, maturation and involution [3, 5, 10]. Self-absorption of 15-20% of GA located on the skin is observed.

Currently, there are more than 20 classifications of hemangiomas around the world according to their shape, character, histological structure, complications and other characteristics [5, 8, 9]. Some of them are still used in the clinical practice of some clinics, for example, the simplified GA classification proposed by Kondrashin (1963) [3, 5, 9, 11].

- Normal capillary
- Normal hypertrophic
- Cavemosis
- Mix
- Systemic hemangiomatosis

In international practice, the classification adopted by the International Society for the Study of Vascular Anomalies (ISSVA) at the 11th Symposium of the International Society for the Study of Vascular Anomalies held in Rome in 1996 is used to systematize vascular developmental defects [1,4,5,6,8]. In 2007, 2016 and 2018, this accepted classification was supplemented [3, 5, 7, 8, 9].

The purpose of the study. Improving the results of medical treatment of patients with hemangioma during breastfeeding.

Materials and inspection methods. The scientific work was carried out in 2020-2023 at the clinical base of the Impulse Medical Institute and the "Turon Medicine" clinics located in the Kosonsoy district.

Propranolol has been used in medical research in the medical treatment of hemangiomas located on the skin during breastfeeding.

In the study, 40 nursing age patients were examined, all of them were treated with a selection of drug treatment tactics depending on the stage of development of skin hemangioma. The age contingent of patients is from 40 days to 1 year. 78% are girls and 22% are boys.

Diagram 1

Age distribution of patients with cutaneous hemangioma during breastfeeding.

Age group	Number patients	Frequency (%)
Period up to 3 months	3	7,5±4,9*
Period up to 3-6 months	17	42,5±3,9*
Period up to 6-9 months	12	30,0±3,2*
Period up to 9-12 months	8	20,0±2,8
Total :	40	100

* R < 0.05 compared to the comparison group

Diagram 2

Location of hemangiomas in groups.

Position	number	%
Face field	13	32,5±3,4
Head area	11	27,5±5,1
neck area	4	10,0±4,4*
Chest area	3	7,5±3,2
Buttocks and intermediate area	2	5,0±1,7
Hand and foot	3	7,5±1,7
Multiple location	4	10,0±1,7
Total :	40	100,0

All 40 patients with cutaneous GA were treated with β -adrenoblocker (Propranolol). The main criterion for the appointment of drug treatment is the child's age and weight, drug treatment was carried out in the amount of 1-2 mg/kg under the control of AQB and the number of heart contractions after examination by a pediatrician and cardiologist.

The course of treatment was carried out for at least 2 months, and after receiving positive results in dynamics, it was continued up to 6 months. Before starting the treatment and during the treatment, it is necessary to monitor the cardiovascular activity of the patient, such examination methods as ECG, heart rate measurement, blood pressure control and echocardiogram were performed. Sick children should be under the supervision of a cardiologist. 90% of treatment procedures were performed on an outpatient basis, 10% in a daytime inpatient setting.

Diagramm 3

Results of treatment with β -adrenoblocker (propranolol) in patients with cutaneous GA.

Result	Up to 6 months	After 6 months
Good	47%	20%
Satisfied	42%	15%
Dissatisfied	11%	65%

Treatment effectiveness of GAs was assessed by visual (Photography) and UTT+dopplerography results. The effectiveness of medical treatment is determined once a month in UTT dopplerography examination depending on the size of the derivative, the change in blood flow rate.

Venous blood flow before treatment was 8.6 ± 1.1 cm/sec, after treatment 1.0 ± 0.1 cm/sec ($R < 0.05$); in mixed GAs it is 18.7 ± 2.2 cm/sec before treatment, and 2.1 ± 0.1 cm/sec after treatment ($R < 0.05$).

Summary. Medical treatment of patients with hemangioma of nursing age is started as early as treatment efficiency and results are better. Color doppler examination helps to determine the volume of GA, type of blood flow (arterial, venous and mixed) and blood flow speed, and these data are important in predicting drug treatment of GA, evaluating effectiveness and determining treatment tactics. Also, repeated UTT helps to continue the treatment tactics depending on the change of the above parameters of GA in dopplerography.

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