

PROPRANOLOL TREATMENT

Who should be on propranolol?

Propranolol is an old medicine that has been recently found to work very well in treating infantile hemangiomas. Reasons to be put on propranolol are if your child has a hemangioma that (a) can cause serious damage to a part of the body (i.e. eye, liver, airway), (b) is ulcerated (meaning the skin is broken down on the surface, looking like an open wound) or (c) can cause permanent scarring.

Practical things to know about taking propranolol

- You child should not take propranolol if (s)he has a history of low blood sugar, seizures, wheezing, low heart rate, or if (s)he has a condition called PHACES syndrome (a large hemangioma over the face with blood vessel problems).
- Before starting the medication, we will check your child's weight and heart rate
- The medication will be started at a low dose and the dose of the medication will be increased over the next 2 visits to the target dose.
- Do not take any new medications before talking with the clinic
- Take the medicine *two times a day*. The best time is with a feed in the morning and in the late afternoon.
- If your child is sick and does not eat/drink well, stop the medicine and call the clinic immediately.
- Please let your paediatrician or health care provider know that your child is taking this medication. We will be in touch with our doctor as well, but it is a good idea to remind any doctor that your child is on propranolol.
- If you have any questions or concerns about the medication or side-effects, please contact your doctor
- The target dose is 2 mg/kg/day or 3 mg/kg/day divided into 2 doses

Side-effects of propranolol

- Low blood sugars (hypoglycemia) - this is rare, but can happen if your child is not feeding well or vomiting. If the medication is taken when the child feeds, the risk of low blood sugars is much lower.
- Slow heart rate (bradycardia) - this is an expected potential side-effect. As long as the heart rate stays within the normal range (depending on the age of the child), nothing bad should happen. If the heart rate is below normal values (<100 in infants less than 3 months old, <90 in infants 3-6 months old and <80 in infants 6-12 months old), the dose may be lowered.
- Potential worsening of wheezing (bronchospasm) - if your child is wheezing and needing inhaled puffer medicine, stop the propranolol and call the clinic.
- Some children develop poor sleep while on the medication. If you are thinking of 'sleep training' your child, you can still do this while they are on propranolol.
- Some children will have cold hands and feet while on the medication. This is a side-effect that is harmless.

PROPRANOLOL DOSING CHART

(FOR HEMANGIOL)

Weight (kg)	Volume administered twice a day (in mL)		
	Week 1	Week 2	Week 3 (maintenance)
2.5	0.3	0.6	1
2.6	0.3	0.6	1
2.7	0.3	0.7	1
2.8	0.3	0.7	1.1
2.9	0.3	0.7	1.1
3	0.4	0.8	1.2
3.1	0.4	0.8	1.2
3.2	0.4	0.8	1.2
3.3	0.4	0.8	1.3
3.4	0.4	0.9	1.3
3.5	0.4	0.9	1.4
3.6	0.4	0.9	1.4
3.7	0.4	0.9	1.4
3.8	0.5	1	1.5
3.9	0.5	1	1.5
4	0.5	1	1.6
4.1	0.5	1	1.6
4.2	0.5	1.1	1.6
4.3	0.5	1.1	1.7
4.4	0.5	1.1	1.7
4.5	0.6	1.2	1.8
4.6	0.6	1.2	1.8
4.7	0.6	1.2	1.8
4.8	0.6	1.2	1.9
4.9	0.6	1.3	1.9
5	0.6	1.3	2
5.1	0.6	1.3	2
5.2	0.6	1.3	2
5.3	0.7	1.4	2.1
5.4	0.7	1.4	2.1
5.5	0.7	1.4	2.2
5.6	0.7	1.4	2.2
5.7	0.7	1.5	2.2
5.8	0.7	1.5	2.3
5.9	0.7	1.5	2.3
6	0.8	1.6	2.4
6.1	0.8	1.6	2.4
6.2	0.8	1.6	2.4
6.3	0.8	1.6	2.5
6.4	0.8	1.7	2.5
6.5	0.8	1.7	2.6
6.6	0.8	1.7	2.6

Weight (kg)	Volume administered twice a day (in mL)		
	Week 1	Week 2	Week 3 (maintenance)
6.7	0.8	1.7	2.6
6.8	0.9	1.8	2.7
6.9	0.9	1.8	2.7
7	0.9	1.8	2.8
7.1	0.9	1.8	2.8
7.2	0.9	1.9	2.8
7.3	0.9	1.9	2.9
7.4	0.9	1.9	2.9
7.5	1	2	3
7.6	1	2	3
7.7	1	2	3
7.8	1	2	3.1
7.9	1	2.1	3.1
8	1	2.1	3.2
8.1	1	2.1	3.2
8.2	1	2.1	3.2
8.3	1.1	2.2	3.3
8.4	1.1	2.2	3.3
8.5	1.1	2.2	3.4
8.6	1.1	2.2	3.4
8.7	1.1	2.3	3.4
8.8	1.1	2.3	3.5
8.9	1.1	2.3	3.5
9	1.2	2.4	3.6
9.1	1.2	2.4	3.6
9.2	1.2	2.4	3.6
9.3	1.2	2.4	3.7
9.4	1.2	2.5	3.7
9.5	1.2	2.5	3.8
9.6	1.2	2.5	3.8
9.7	1.2	2.5	3.8
9.8	1.3	2.6	3.9
9.9	1.3	2.6	3.9
10	1.3	2.6	4
10.1	1.3	2.6	4
10.2	1.3	2.7	4
10.3	1.3	2.7	4.1
10.4	1.3	2.7	4.1
10.5	1.4	2.8	4.2
10.6	1.4	2.8	4.2
10.7	1.4	2.8	4.2
10.8	1.4	2.8	4.3