

# Infantile Hemangioma

## FAST FACTS

**5–8 weeks of age**

most rapid period of growth for IH

**~50%**

of infantile hemangiomas involute by the age of 5 years

Infantile hemangiomas (IH) are common tumors of the vascular endothelium. Most IH follow a predictable growth pattern. They typically become noticeable in the first few weeks of life, often first appearing as precursor lesions with features such as telangiectasias surrounded by a vasoconstricted halo, areas of pallor, pink macules and bruise-like patches.

Most IH are benign and self-limited and do not require intervention. However, some hemangiomas pose a risk for complications and warrant treatment.

## ASSESSMENT

Perform a standard health history and physical exam including vital signs, examination of the cardiovascular and respiratory systems, and palpation of the liver and spleen. Evaluate the skin and mucous membranes. IH may be superficial (red plaque), deep (blue swelling or subcutaneous nodule) or mixed (both components).

## HISTORY AND PHYSICAL EXAM RED FLAGS

- 5 or more cutaneous IH
- IH in a “beard distribution”
- IH involving the face, especially the eyelid, nasal tip or lip(s)
- IH >5 cm in diameter
- Involvement of diaper area
- Presence of ulceration
- Risk of functional impairment due to location (e.g., airway, nasal passages)

## MANAGEMENT/TREATMENT

If IH is very small, singular and no red flags, patients likely do not require a referral or treatment. Benign, self-limited IH resolve on their own by age 5 to 8 years. They may leave behind telangiectasias, fibrofatty residual, changes in skin texture and distortion of underlying structures.

## WHEN TO REFER

If red flags, initiate timolol (topical) 0.05% gel-forming or regular solution: 1–2 drops to surface of IH q12h. Continue topical timolol until about 12 months of age if comfortable and therapy is providing adequate benefit. Refer patient to pediatric dermatology or the Hemangioma and Vascular Malformation Clinic at Cincinnati Children's for follow-up. Subspecialty care may involve further treatment with a different beta-blocker medication.

Beta blockers are most effective when initiated as early as possible, ideally between 5 and 10 weeks of age.

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

If you have clinical questions about a patient with infantile hemangioma, email [dermatology@cchmc.org](mailto:dermatology@cchmc.org).

For urgent issues or to speak with a pediatric dermatologist on call 24/7, call the Physician Priority Line at 1-888-987-7997.

# Infantile Hemangioma

**Patient Presents**

**Standard Workup**

- Perform standard health history and physical exam:
- Vital signs
  - Assessment of cardiovascular and respiratory systems
  - Palpation of liver and spleen

- Evaluate the skin and mucous membranes. IH may be:
- Superficial (red plaque)
  - Deep (blue swelling or subcutaneous nodule)
  - Mixed (both components)

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**Any Red Flags?**

**Yes**

**No**

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Patient is unlikely to require a referral or treatment. Continue to monitor for red flags.