

Inpatient Consultation for the Management of Infantile Hemangiomas

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Background/Objective:

Infantile Hemangiomas (IH) are the most common pediatric benign vascular tumors, affecting approximately 4-5% of infants. To our knowledge, there has not been a dedicated study looking at inpatient dermatology consultation for IH. While the majority of IH do not require treatment, high risk hemangioma may require additional workup and treatment. This study aims to characterize clinical and demographic features, identify associated comorbidities and risk factors, and describe the utilization of pediatric dermatology consult service at Riley Children's Hospital for management of IH.

Methods:

A REDCap database was used to record demographic and clinical characteristics, treatment details, and Hemangioma Severity Score on 36 patients from 12/19/2022 – 10/17/2024 and 1/20/2025 – 6/20/2025 who consulted dermatology. Excel and REDCap were both utilized for analysis.

Results:

The majority of consultations consisted of infants born at less than 37 weeks of gestational age (GA). Consultations were evenly split between NICU and general pediatric wards, however, the median GA at the time of consultation was 9.35 weeks for NICU patients and 7.75 weeks for pediatric ward patients. Preterm infants were more likely to present with superficial IH, particularly those with thicker subtype and stepped border. Stepped borders are associated with a higher risk of permanent disfigurement. Notably, 0.25% topical timolol was more frequently recommended over the standard 0.5% formulation recommended by current literature.

Conclusion and Potential Impact:

This study highlights the importance of dermatological input in the inpatient setting for the management of IH. Characterizing consult patterns provides a foundation for future inpatient IH consultation studies. Future directions may include evaluating off-label timolol use in the inpatient setting and analyzing delays in NICU referral to improve IH outcomes.