

**Comparative Outcome Analysis of Pediatric Hemangioma Removal Under General or Local Anesthesia**

**Background:** Hemangiomas are one of the most common pediatric tumors. Hemangiomas can be treated with both medical and surgical therapies. Surgical excision is typically performed either in the operating room (OR) under general anesthesia, or in the office using local anesthesia. The literature comparing surgical excision performed in the OR versus in-office is lacking.

**Methods:** A chart review was conducted to assess the outcomes of 59 patients who underwent surgical excision of hemangiomas by one pediatric plastic surgeon. Procedure location, complications, completeness of resection, and time to procedure were recorded.

**Results:** 59 patients underwent excision between 2017-2021. 20 patients (mean age:38 months, SD:35) received 23 procedures in the OR and 39 patients (mean age:31 months, SD:46) received 40 procedures in-office. Average hemangioma size was 2.1 cm (SD:0.87) for the office group, and 3.9 cm (SD:2.4) for the OR group; no significant association was found between hemangioma size and resolution rate. The office group had 25 patients with complete resolution (64%) and 14 with partial resolution (36%), which was not significantly different from the OR group's complete resolution (55%) and partial resolution rates (45%). Neither group experienced any cases of significant (>10cc) blood loss, infection, dehiscence or hematoma requiring evacuation. One patient in each group developed scar hyperemia; both were managed successfully with laser therapy.

**Conclusion:** In-office surgical excision of hemangiomas in pediatric patients may be equally efficacious as in the OR, while maintaining low complication rates and time to procedure.