Hemangiomas in infancy – therapeutic options

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Aim: Complicated infantile hemangiomas need early, safe and effective treatment. The aim of this study was to provide greater insight into systemic and topical propranolol treatment efficacy and side effects.

Methods: We report our retrospective experiences of 207 paediatric patients treated with systemic propranolol and of 148 paediatric patients treated with propranolol gel topically photographed and analysed with a specific hemangioma score.

Results: Propranolol treatment was successful in >99 % of the patients. The hemangioma score showed a significant decrease during systemic treatment (8.3 ± 3.3 at beginning and 1.5± 1.4 at the end of treatment). Systemic treatment did not show any differences when distributed according to different localisations or to the patients’ ages. During topical propranolol treatment relevant serum levels were not determined. Relevant side effects that may have made it necessary to discontinue the treatment were not observed. However, there was a statistically significant reduction in heart rate during the first six in-hospital systemic drug applications.

Conclusion: Systemic propranolol treatment is highly effective and nearly always safe. Topical treatment with propranolol gel is suitable for specific hemangiomas in addition to cryotherapy and systemic treatment with propranolol. These findings provide highly valuable information on this drug treatment for complicated hemangiomas in infants.