

## ABSTRACT

**Background :** Capillary hemangiomas are benign tumors with many variation of sizes that appear at the age of baby and children. However, this hemangioma can also occur in adults, although it rarely happens.

**Objective:** to measure and to see how is the relationship between patient age and the size of capillary hemangioma tumor.

**Method:** This study used a cross sectional design. This research was conducted at the Department of Ophthalmology of Dr. Sardjito hospital from February to June 2019. Complete datas of capillary hemangioma were collected and then were analyzed statistically using the Shapiro-Wilk normality test, Spearman's Rank correlation test and binary logistic regression correlation test.

**Results:** Subjects were divided into 7 age groups, which is 1-10 years, 11-20 years, 21-30 years, 31-40 years, 41-50 years, 51-60 years and >60 years with an average age of 28 years. The size of the hemangiomas is classified into 2 groups, which is  $\leq 5 \text{ cm}^2$  (small) and  $> 5 \text{ cm}^2$  (large) with an average size of  $5.04 \pm 1.13693 \text{ cm}^2$ . Spearman's Rank and Binary Logistic Regression analysis results showed  $r = 0.562$  and  $p = 0.012$  respectively for the relationship between patient's age and capillary hemangioma tumor's size.

**Conclusion:** Age is a factor that affects the size of a capillary hemangioma tumor. The older a person, the greater the size of a capillary hemangioma tumor.

**Keywords:** Capillary Hemangioma, Periorbita, superficial vascular malformation, Infantile Hemangioma, benign tumor, Beta-blockers

## INTISARI

**Latar Belakang** : Hemangioma Kapiler adalah tumor jinak dengan berbagai ukuran yang biasa muncul pada usia bayi hingga anak-anak. Hemangioma ini juga bisa terjadi pada orang dewasa, meskipun jarang terjadi.

**Tujuan** : mengukur dan melihat bagaimana hubungan antara usia pasien dengan ukuran tumor hemangioma kapiler

**Metode** : Studi ini menggunakan desain *cross sectional*. Penelitian ini dilakukan di Departemen Mata di RSUP Dr. Sardjito dari Februari sampai Juni 2019. Data dari pasien hemangioma kapiler yang lengkap diambil, kemudian di analisis secara statistik menggunakan uji normalitas *Shapiro-Wilk*, uji korelasi *Spearman's Rank* dan uji korelasi regresi logistik biner.

**Hasil** : Subjek dibagi menjadi 7 kelompok usia, yaitu 1-10 tahun, 11-20 tahun, 21-30 tahun, 31-40 tahun, 41-50 tahun, 51-60 tahun, dan >60 tahun dengan rata-rata berusia 28 tahun. Ukuran dari hemangioma digolongkan menjadi 2 kelompok, yaitu  $\leq 5 \text{ cm}^2$  (kecil) dan  $> 5 \text{ cm}^2$  (besar) dengan rata-rata ukuran  $5.04 \pm 1.13693 \text{ cm}^2$ . Hasil analisis *Spearman's Rank* dan Regresi Logistik biner menunjukkan hasil  $r=0.562$  dan  $p = 0.012$  secara berturut-turut untuk hubungan antara usia pasien dengan ukuran tumor hemangioma kapiler.

**Kesimpulan** : Usia merupakan faktor yang mempengaruhi ukuran tumor hemangioma kapiler, dimana semakin tua seseorang semakin besar pula ukuran tumor hemangioma kapiler.

**Kata Kunci** : Hemangioma Kapiler, Periorbita, malformasi vaskuler superfisial, hemangioma *infantile*, tumor jinak, *beta-blockers*