

## **An Epidemiological Study on Cutaneous Melanoma, Basocellular and Epidermoid Carcinomas Diagnosed in a Sunny City in Southeast Brazil in a Five-Year Period**

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**Abstract :** Skin cancer is the most common cancer in several parts of the world; in a tropical country like Brazil, the situation isn't different. The Brazilian population is exposed to high levels of solar radiation, increasing the risk of developing cutaneous carcinoma. Aimed at encouraging prevention measures and the early diagnosis of these tumors, a study was carried out that analyzed data on cutaneous melanomas, basal cell, and epidermoid carcinomas, using as primary data source the medical records of 161 patients registered in one pathology service, which performs skin biopsies in a city of Minas Gerais, Brazil. All patients diagnosed with skin cancer at this service from January 2015 to December 2019 were included. The incidence of skin carcinoma cases was correlated with the identification of histological type, sex, age group, and topographic location. Correlation between variables was verified by Fisher's exact test at a nominal significance level of 5%, with statistical analysis performed by R® software. A significant association was observed between age group and type of cancer ( $p=0.0085$ ); age group and sex ( $0.0298$ ); and type of cancer and body region affected ( $p < 0.01$ ). Those 161 cases analyzed comprised 93 basal cell carcinomas, 66 epidermoid carcinomas, and only two cutaneous melanomas. In the group aged 19 to 30 years, the epidermoid form was most prevalent; from 31 to 45 and from 46 to 59 years, the basal cell prevailed; in 60-year-olds or over, both types had higher frequencies. Associating age group and sex, in groups aged 18 to 30 and 46 to 59 years, women were most affected. In the 31-to 45-year-old group, men predominated. There was a gender balance in the age group 60-year-olds or over. As for topography, there was a high prevalence in the head and neck, followed by upper limbs. Relating histological type and topography, there was a prevalence of basal cell and epidermoid carcinomas in the head and neck. In the chest, the basal cell form was most prevalent; in upper limbs, the epidermoid form prevailed. Cutaneous melanoma affected only the chest and upper limbs. About 82% of patients 60-year-olds or over had head and neck cancer; from 46 to 59 and 60-year-olds or over, the head and neck region and upper limbs were predominantly affected; the distribution was balanced in the 31-to 45-year-old group. In conclusion, basal cell carcinoma was predominant, whereas cutaneous melanoma was the rarest among the types analyzed. Patients 60-year-olds or over were most affected, showing gender balance. In young adults, there was a prevalence of the epidermoid form; in middle-aged patients, basal cell carcinoma was predominant; in the elderly, both forms presented with higher frequencies. There was a higher incidence of head and neck cancers, followed by malignancies affecting the upper limbs. The epidermoid type manifested significantly in the upper limbs. Body regions such as the thorax and lower limbs were less affected, which is justified by the lower exposure of these areas to incident solar radiation.

**Keywords :** basal cell carcinoma, cutaneous melanoma, skin cancer, squamous cell carcinoma, topographic location

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