Regression of an Epidermoid Carcinomas in Domestic Canine Treated with Casiopeína® IIgly †

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1. Introduction

Squamous cell carcinoma (SCC) is a malignancy that has no treatment. It develops in the scaly layer of the skin and affects the thoracic, phalangeal, and scrotal limbs, among others (Vet Pathol 2013, 50 (6): 1078). Macroscopically, it presents papillae that can ulcerate and bleed. At histological level, it shows hyperkeratosis, parakeratosis, keratin beads, and cellular pleomorphism (Ginn, 2007, pp. 748–751). On the other hand, Casiopeínas® (Cas) (Ruiz-Azuara, 1992, 1996, 2002, patent US.) have shown antineoplastic activity through mitochondrial apoptosis (Biometals 2017, (1): 43). Casiopeínas represent an important therapeutic alternative for the treatment of SCC.

2. Objective

To evaluate the tumor regression of a canine squamous cell carcinoma by the treatment with Casiopeína Ilgly.

3. Materials and Methods

After diagnosis of SCC, peripheral blood and urine were collected to perform blood count, urea, creatinine, phosphorus, ALT, AST, and glucose, before and after treatment. The treatment consisted of the administration of 35 mg/m² of CasIlgly i.v. for 60 min, in 5% glucose solution. For cytology, two swabs of the lesion were taken every two hours for 6 h. The second and third doses of CasIlgly were administered every 4 h, and two swabs were taken just before the application of the drug. In conjunction with the treatment, a solution of 33.35 mg of CasIlgly dissolved in 33.5 mL of 5% glucose solution was applied directly to the neoplasm, every 12 h for 27 days.

4. Results

We did not find changes in blood or urine, so CasIlgly did not produce systemic alterations. On the other hand, the neoplastic mass decreased its size, both in diameter and in depth, all suggestive of tumor regression.
5. Conclusions

The application of CasIIgly following the treatment scheme proposed in this work is effective against CCE in dogs. However, molecular evaluations should still be done to check tumor regression.