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Research Article

EXTRAGENITAL TRANSMISSIBLE VENEREAL TUMOR IN MESTIZO DOG

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ABSTRACT

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Keywords:

Transmissible venereal tumor, Vincristine Sulfate, histopathological, cycles The aim of this paper is to show a case of transmissible venereal tumor (TVT) in a mongrel dog. Physical examination, imaging and histopathologic diagnosis was made. On physical examination, he presented bulge in the front of the head and mouth ulceration; in imaging, it was found vomer bone slightly off and obstructed nasal turbinates; in histopathologicalo, TVT cancer cells were found. Was administered treatment Vincristine Sulfate for 5 weeks, at doses of 0023 mg / kg (3.7 ml) every 7 days for four cycles (with each period of treatment followed by a recovery period), however the last cycle decided to administer a dose of 0.028 mg / kg (5.7 ml). In conclusion, the animal showed no improvement in reducing the tumor mass by 80% in the fifth week of treatment.

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INTRODUCTION

The transmissible venereal tumor (TVT) is a specific neoplastic of dogs and one of the most common in this species (Ortega *et al.*, 2003). It is the transplantable tumor that is most often spread through sexual intercourse, transmitted from dog to dog by living cells. Previous studies have indicated that the TVT would be composed of immature myeloid origin likely leukocytes (Sanchez *et al.*, 2013).

The transmissible venereal tumor (TVT) or Sticker tumor is usually malignant and transplantable transmissible, which mainly affects the external genitalia of the male and female (Bonagura, 1994). However, it has also Extra genital areas diagnosed as skin, face, nasal passages, buckle cavity and interior contour of the eyes, spleen, liver, brain and lungs (Ortega *et al.*, 2003). Metastasis takes place in less than 5% of cases reported and presented in animals over two months of persistent tumor (Salamanca *et al.*, 2008).

It described a high prevalence in African countries, reaching 34% of the population, while in Latin America reported 2.6% prevalence in stray dogs in Merida, Mexico (Grandez *et al.*, 2011). In Mexico the most common malignancy was

established 1984 to 1985 with 45 cases (21.63%) and in 1986 with 19 cases (16.96%) (Morales and Gonzales, 1995). Considered endemic in this country, but with a low prevalence (Ramirez *et al.*, 2010).

This neoplastic is high incidence in dogs of 54-64% in cases of mixed race, 72% adults 4-5 years, its presentation is closely related to reproductive activity. This neoplasm occurs primarily in medium-sized dogs aged 1-15 years (median 7 years) being most affected males. However, some authors report greater frequency of occurrence in females (52-72%) (Salamanca *et al.*, 2008).

Dogs with TVT in genital mucous exhibit intermittent and persistent exudate serosanguinous, bloodypio or hemorrhagic material. The tumor may be cauliflower, but has also been reported from stalked forms, nodular, papillary or multilobal. Exploration dyed fabric impression smears is considered an appropriate method of diagnosis (Zerpa and Rojas, 2014).

You should use chemotherapy, although spontaneous regression has been reported in experimental cases (Zerpa and Rojas, 2014). Several reports point to chemotherapy with vincristine sulfate as the most effective treatment because it has a 90% success in the TVT genitals Extragenital metastasis.

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Usually in doses of 0023-0026 mg / kg, 4 to 8 cycles every 7 days. (Grandez *et al*, 2011;. Ramirez *et al*., 2011).

The purpose of this study was to assess clinical case of TVT in mutt and administer treatment.

MATERIAL AND METHODS

Case History

If a dog was reported to take him to the clinic, we proceeded to perform the diagnostic and case management procedures. The dog was a male of mixed race with traits German shepherd approximately 5 years, 29 kg, was an adequate nutritional status, with a balanced behavior, normal gait, takes proper rest and walking positions, fur shiny without bald spots, had abnormalbreathingnoises and special features such as thickening of the rostral area of the head, swelling and ulceration (Fig. 1)



Figure1 Rostralmestizo male with bulging with nasal ulcerations and deformation nose channel.

A lump of irregular shape with a size of 5.6 cmin the left hemisphere (Fig. 2) and 3.8 cmof the right hemisphere (Fig. 3) was identified, its consistency is fibrous, edematous and fluctuating up hard as a thick tissue, it maintains a only minimal sensitivity and pain in the lesions (sores) shows signs of localized pain, contains motility and checking if there is any connection to outside structures such as bone and skin. (Fig.3).

Contains a delimited area the tumor mass and specific area in the region of the head. (Fig. 4). His temperature was normal and showed no specific features of canine coat color colors.



Figure 2 Swelling of the left hemisphere



Figure3 Bulging of the right hemisphere.



Figure 4 Note localized tumor mass.

Respiratory movements were normal, the depth was normal inspiration and expiration in a strange sound was produced, performed by the expiration muzzle inflation observed the lips to expel air. His respiratory rate is 15 breaths per minute, pulse with an average of 90 beats per minute and body temperature was $38.2 \degree C$.

The nasal mucous membranes were a normal color assessment, the capillary refill time was 1 second, showed no bleeding within these, the teeth are in good shape and structure (little plaque), total number of completed parts.



Figure5 ulcerationsand soft palate

On examination of the respiratory system could be seen in the sinuses, runny nose, which was viscous with little presence of blood, had the presence of sneezing, blocked nasal membranes, nasal stridor, different noises, cough, sputum, dyspnea, he showed palate soft with ulcerations (Fig. 5) and two injuries in the rostral region of the nose, to a fibrous, edematous, painless palpation for the animal, except for localized lesions with ongoing bleeding and limiting scarring lesions (Fig. 6).



Figure6 lesionsin the rostralregionof the nose

In making radio graphic image is observed that the ovomerb one has a deviation, which indicated to us the possible presence of cancer (fig. 7), the absence of alesionasymmetry show sa relative valuation intranasal neoplasm, the condition frontal sinuses and therefore there is afading surrounding bone, includingvomer.



Figure 7 intraoral radiography where Fading and vomerdisplacement to the left, opacity leftnasalcavity or channel.



Figure 8 Projected sinus nasal cavity.

Nasal corteges were visible in lateral view (Fig. 8), for which faint lines alternating light and dark gray color is observed, could also see one of the asymmetry of the nasal turbinate sis clear and reliable indicator of the presence of fluid and therefore less often a cause for bacterial or fungal infection, could be observed a loss of normal pattern turbinates jaws typically characterized by a combination of light and dark parallel lines, alternating fine and coarse.

Histopathology a fragmented mass which was made by incisional biopsy to avoid compromising subsequent curative resection or contaminate the margin needed for tissue reconstruction is analyzed. When analyzed in the microscopic description have six sections of ill-defined new tissue formation, encapsulated, composed of round cells arranged in solid pattern, and are supported by a fine fibro vascularstromal and collagen. Cells have poor moderate eusinofilico slightly granular cytoplasm and / or cytoplasmic vacuolated defined edges. The nuclei are round, central and conveyed exhibited a large nucleus and basophilic on average; With marked megacariosis to 5 atypical mitotic figures were observed in 10 random fields with 40X objective. Areas of necrosis and hemorrhage are observed, as well as aggregates of lymphocytes, macrophages and eosinophils. Neoplastic cells are seen in surgical sections referred Borden. With this description it was determined that it was transmissible venereal tumor.

Treatment

After obtaining a definitive diagnosis, the decision to provide primary treatment where no esteroideales inflammatory (Cox II-Kirol, Tolfine-Vetoquinol) was administered, having an effect on tumor mass, blocking the activity of the enzyme cyclooxygenase COX took -2, primary enzyme involved in the synthesis of PGs (prostaglandins) and important molecules in inflammatory and painful conditions. I was also administered Antibiotics Penimox La-Bayer, Enroxil 5% Senosain, Sentoprim Chinoin; Antagonists: Ranipets-Pets Farma; Vitamins B Complex Strong-Brovel.

Antiseptic Disinfectant: Iodine Disinfectant-Aranda, BonuX-Maver, this was done in order to reduce pain, eliminate pathogens, prevent secondary infections, protect and assist the canine protection. For treatment of tumor mass (TVT) chemotherapeutic treatment based Vincristine Sulfate type decided at a rate of 0.023 mg / kg (3.7 ml), applying the first 4 cycles intravenously with 60 min, In the fifth cycle of treatment was decided to administration of 0.028 mg / kg (5.7 ml) for the purpose of observing a greater improvement.

RESULTS

In the first week the healing process (Fig. 9) accelerated. In week 2regressionofabout 15% the size of the tumor mass (Fig.10) was observed. The third week was observed improvement in abob a mien to palate and ulceration (11). Int he fourth week of treatment, there was a decrease intumor mass was shown a change in the attitude of the patient, where it is already showing lively and inhibition of stridorsound (fig. 12). The results at the end of treatmentis a80% reduction in tumor mass in the patient, stridorsounds completely eliminated, eliminating runoff nasal mucus in exploring shown are coverysince there mainingtumor mass it has a firm, no

purulent, good conformation, elimination of localized painandinjuries were completely inhibited (Fig. 13).



Figure 9 First week of healing treatment of injuries.



Figure10 Second week of treatment. Mass reduction of 15%



 $Figure \ 11 \ {\rm Third} \ {\rm week} \ {\rm of} \ {\rm treatment}. \ {\rm Noinjuries} \ {\rm and} \ {\rm soft} \ {\rm palate} \ {\rm formation}$



Figure 12 Fourth week of treatment. Decreased tumor mass and decreased elimination of nasal mucus



Figure 13 Quinta week of treatment. Decrease in tumor mass about 80% and removal of signs.

DISCUSSION

As mentioned Grandez *et al.*, 2011, being a stray dog the patient more prevalent these have TVT. However Salamanca et al., Reports that there are more prevalent in females, which is inconsistent in this case since the patientis male. And agreeing with Grandez *et al.*, 2011and Ramirez *et al.*, 2011 vincristinebased chemotherapy was the best treatment. In conclusion, the animals showed improvement in reducing the tumor mass by 80% in the fifth week of treatment.

References

- Ortega Pacheco Antonio, Acevedo Arcique Martín, Sauri Arceo Carlos, Bolio González Manuel y Gutiérrez Blanco Eduardo.2003. Prevalencia de tumo venéreo transmisible en perros callejeros de la ciudad de Mérida. Rev Bimed; 14 (2):83-87.
- Sánchez A., Kummer C., Murillo A., Regué C., Leucona P. y Marini M.R. 2013. Timor venéreo transmisible multisistémico: presentación de un caso. XIV Jornadas de Divulgación Técnico-Científicas. Facultad de ciencias veterinarias-Universidad Nacional de Rosario.
- Morales Salinas Elizabeth y González Cruz Gerardo. 1995. Frecuencia de tumor venéreo transmisible en

perros de la ciudad de México entre 1985 y 1993.Vet. Mex; 26 (3): 273-275.

- 4. Grandez R. Ricardo, Miguel de Priego G. Claudia, Yi A. Pedro y Torres P. Luis. 2011. Tumor venéreo transmisible canino extragenital: estudio retrospectivo de 11 casos; Rev Inv Perú; 22 (4): 342-350.
- Zerpa Rocío y Rojas Ricardo. 2014. Frecuencia del tumor venéreo transmisible en perros de la Urbanización Mariscal Cáceres, San Juan de Lurigancho. Lima-Perú. Salud y tecnol. Vet; 4 (2): 93-98.
- Salamanca S., Santader Baquero A., Triana García PA., Romero S. y Rondón Barragán IS. 2008. Tumor venéreo transmisible (TVT) con metástasis pulmonar: reporte de caso. Orinoquia; 12 (2): 162-170.
- Ramírez Romero Rafael, García de Jalón Ciércoles José Antonio, Nevárez Garza Alicia Magdalena y Rodríguez Trovar Luis Edgar. 2010. Tumor venéreo transmisible con metástasis a un hemangioma esplénico en una perra. Vet. Méx; 41 (4): 305-310.
- Ramírez Pérez Y. E., Reyes Ávila I. R., Rodríguez Valera Y., Cuesta Guillén A. F. y Pérez Castro L. E. 2011. Tumor venéreo transmisible en un perro mestizo y su respuesta a la quimioterapia citostática. REDVET; 12 (6): 1-5.

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