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HEMANGIOMA IN PALE-BREASTED THRUSH *(TURDUS LEUCOMELAS)*

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RESUMO

Este relato de caso descreve a ocorrência de hemangioma em um sabiá-barranco *(Turdus leucomelas)* macho, de idade não identificada, apreendido do tráfico de animais silvestres e encaminhado ao Centro de Recuperação de Animais Silvestres *"Núcleo da Floresta"*, em São Roque, SP, Brasil. A ave apresentava uma massa pedunculada na bochecha direita, que foi removida cirurgicamente e enviada para análise histopatológica. Os resultados revelaram a presença de canais vasculares tortuosos e anastomosados, revestidos por uma única camada de células endoteliais típicas e preenchidos com hemácias. O estroma era colagenoso e discreto, e as células endoteliais apresentavam limites citoplasmáticos indistintos, citoplasma fusiforme, núcleo alongado e cromatina densa. Não foram observadas atipias celulares nem figuras mitóticas. A descrição histológica permitiu concluir que se tratava de um hemangioma. Este é o primeiro relato da ocorrência de hemangioma em aves do gênero *Turdus*, bem como o primeiro registro de neoplasia em *Turdus leucomelas.*

Palavras-chave: Neoplasia; Passeriformes; Oncologia; Patologia aviária; Saúde animal.

ABSTRACT

This case report describes the occurrence of hemangioma in a male Pale-breasted thrush (Turdus leucomelas), unidentified age, apprehended from the trafficking of wild animals and sent to the Center for the Recovery of Wild Animals "Núcleo da Floresta", São Roque, SP, Brazil. The bird had a peduncular mass on the right cheek that was surgically removed and sent for histopathological analysis. The results showed the presence of tortuous and anastomosing vascular channels, lined by a single layer of typical endothelial cells and filled with erythrocytes. Its stroma was collagenous and discrete, and the endothelial cells exhibited indistinct cytoplasmic boundaries, fusiform

cytoplasm, elongated nucleus and dense chromatin. There was also no cellular atypia and no mitotic figures were observed. The histological description allowed to conclude that it was an hemangioma. This is the first description of the occurrence of hemangioma in birds of the genus *Turdus*, as well as it is also the first description of the occurrence of neoplasia in *Turdus leucomelas.*

Keywords: Neoplasia, Passerines, Oncology, Avian pathology, Animal health.

INTRODUCTION

Pale-breasted thrush is a passerine bird of the genus *Turdus* that inhabits forest areas of most South America countries, such as Brazil, Argentina, Bolivia, Colombia, French Guiana, Guyana, Paraguay, Peru, Suriname and Venezuela (BIRDLIFE INTERNATIONAL 2018; MELLO et al. 2020). Despite not being considered a threatened species by the IUCN Red List (BIRDLIFE INTERNATIONAL, 2018).

The identification of neoplasms has become an important habit in avian medicine because, in addition to increasing the knowledge base of cases, it has helped to improve clinical procedures, however information about prognosis and antineoplastic therapies are still scarce in the literature and every new report is important, so that we can improve the care of the avian patient (REAVILL, 2004).

Descriptions addressing the occurrence of neoplasms in Passeriformes birds are scarce in the literature, with occurrence described in only two species belonging to the genus *Turdus*. (HARTUP & STEINBERG 1996; WERNER et al. 1998; LIMA et al. 2016; URRACA et al. 2018). Therefore, it is a report of a facial hemangioma in *Turdus* leucomelas diagnosed in São Roque, SP, Brazil.

CASE REPORT

A *Turdus leucomelas*, male, 70 g, age unknown, was apprehended as illegal animal trafficking by the Environmental Police of the State of São Paulo, and sent to the Wild Animal Recovery Center "Núcleo da Floresta", SP, Brazil. On physical examination, the presence of a single cutaneous mass was detected on the right rostral face in the infraocular position. It had a peduncular appearance, oval in shape, 5.5 mm in diameter and 8.5 mm in length, with a soft appearance on palpation (Figure 1).

Figure 1. Presence of an infraorbital pedunculated mass in Turdus leucomelas.

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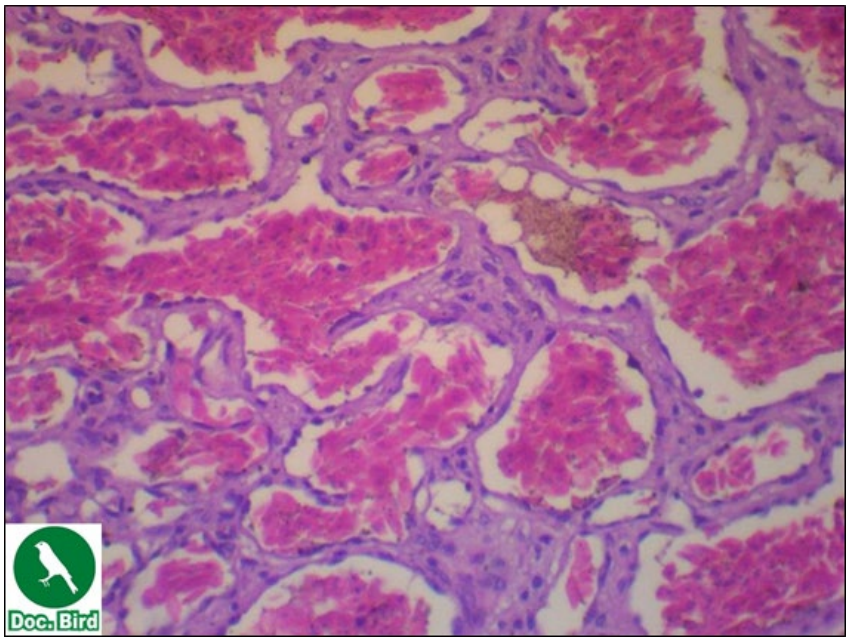
The mass emerged from the skin, with no infiltration into the musculature or other adjacent structures.

Surgical excision was performed, and the animal was sedated with ketamine (10 mg/kg intramuscularly) and local infiltration of lidocaine (mg/kg). After removal of the mass, the fixation point was cauterized and the wound sutured. Postoperative analgesia was performed with meloxicam (1 mg/kg orally) every 12 hours for 5 days (CARPENTER & HARMS, 2023).

The excised tissue was fixed in 10% formaldehyde, included in paraffin and submitted to the Hematoxylin and Eosin (HE) staining technique, being analyzed by Doc.Bird® – Consulting in Avian Medicine, Exotic and Wild Animals, Botucatu, SP, Brazil.

Microscopically, the dermal mass consisted of tortuous and anastomosing vascular channels, covered by a single layer of typical endothelial cells, and filled with erythrocytes (Figure 2).

Figure 2. Microscopy of the dermal mass, where it is possible to observe the presence of tortuous and anastomosing vascular channels, lined by a single layer of typical endothelial cells and filled with erythrocytes (Turdus leucomelas, HE, 100x).



The stroma was discrete and collagenous, and the endothelial cells exhibited indistinct cytoplasmic boundaries, fusiform cytoplasm, elongated nuclei, and dense chromatin. There was no cellular atypia or mitotic figures. The histological description allowed to conclude that it was hemangioma. After a year of monitoring, the neoplastic mass did not grow back, and the bird was rehabilitated and released into the wildlife.

DISCUSSION

Vascular neoplasms are described in several species of animals, such as pigs, horses, cattle, dogs and chickens (ANDERSON et al. 1988; GRONDAHL & JANSEN, 1991; TANIMOTO & OHTSUKI 1992; VERMUNT & THOMPSON 2001; SOARES et al. 2017). They are usually of slow growing and are completely cured after surgical excision, but new tumors can develop if exposure to sunlight continues intense (HENDRICK, 2017). In the present case, after one year of follow-up, there was no recurrence of the neoplastic mass.

Hemangiomas are benign tumors of the vascular endothelium, they can be dermal or epidermal,

occurring in any part of the body, being related to areas of the body with more exposure to sunlight. Macroscopically, the hemangioma is a well-demarcated mass whose color varies from bright red to brown, and there may be cases with a darker color that can be confused with melanoma. There may also be a verrucous variation that is much less demarcated, multinodular and with epidermal hyperkeratosis. Microscopically most tumors are well circumscribed and composed of large vascular spaces, filled with erythrocytes, being lined by a single layer of uniform endothelial cells with discrete nuclei. It is possible to find organized thrombi and foci of hemosiderosis. Hemangioma can be further classified as cavernous or capillary, based on the size of the vascular channels. In the cavernous type there are large channels separated by a stroma of fibrous connective tissue, which may contain lymphocytes and other inflammatory cells. On the other hand, the capillary type has scarce stroma, larger and with a more cellular appearance, sometimes with pleomorphic nuclei. In both cases mitotic figures are rare. (HENDRICK, 2017).

Classically, cutaneous hemangiomas are caused due to exposure to solar radiation, however Retrovirus infections can also induce this type of neoplasm. However, in these cases, in addition to the appearance of it on the skin, there is a visceral manifestation that can affect the spleen, liver, kidneys and gonads. (HENDRICK, 2017; BARBOSA & COLVERO, 2020).

There is a scarcity of data on neoplasms in birds of the genus *Turdus*, with the occurrence of hemangiosarcoma and squamous cell carcinoma being described in *T. rufiventris* (WERNER et al. 1998; LIMA et al. 2016), osteosarcoma and thymoma in *T. migratorius* (HARTUP & STEINBERG 1996; URRACA et al. 2018).

In other Passerines the occurrence of neoplasms was described, such as hemangiosarcoma in *Lonchura oryzivora* (NAKANO & UNE 2011) *and Saltator maximus* (DUARTE et al. 2021); Sertoli cell tumor in *Chloebia gouldiae* (ROSSi et al. 2003); papilloma in *Fringilla coelebs* (LITERÁK et al. 2003); melanoma in *Taeniopygia guttata* (IRIZARRY-ROVIRA et al. 2007); osteoma and fibrosarcoma in *Serinus canaria* (PALMIERI et al. 2011; JAVDANI et al. 2017); retroviral lymphomas in *Sturnus vulgaris* (WADE et al. 1999), *S. canaria* (MARTINS, et al. 2004), *Garrulax albogularis*, *Tangara schrenkii, Gracupica contra and Gracula religiosa* (DREW, 2007); and myxoma in a hybrid of *Sporagra magellanica x Serinus canaria* (BLUME et al. 2015).

In conclusion, this is the first description of a hemangioma in *Turdus leucomelas*. Besides being the first neoplastic record for the species, it also records the fourth type of neoplasia in birds of the genus *Turdus*. These data are important for a better understanding of the occurrence of neoplastic phenomena in birds.

REFERENCES

ANDERSON, W.I.; LANGHEINRICH, K.A.; MCCASKEY, P.C. Proventricular hemangiosarcoma identified in a broiler at slaughter. **Avian Dis,** v. 32, n. 1, p. 148-150, 1988. DOI: doi.org/10.2307/1590965

BARBOSA, T.M.C.; COLVERO, L.P. Enfermidade de Marek, complexo leucocítico aviário e reticuloendoteliose (2020). In. ANDREATTI FILHO, R.L. et al. (Org). **Doenças das Aves,** 3. ed. FACTA, Campinas. p. 675-691.

Birdlife International (2018) Turdus leucomelas. The IUCN Red List of Threatened Species 2018. Disponível em: e.T22708888A132077787. https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.

T22708888A132077787.en. Acessado: 08 out. 2025.

BLUME, G.R.; PEREIRA, F.M.A.M.; REIS JÚNIOR, J.L.; SANT'ANA, F.J.F. Cutaneous myxoma in a Pintagol (Sporagra magellanica x Serinus canaria). **Ciên Rural,** v. 45, p. 1641-1643, 2015. DOI: 10.1590/0103-8478cr20141854

CARPENTER, J. W.; HARMS, C. A. **Carpenter's Exotic Animal Formulary,** 6ª ed. St. Louis: Elsevier, 2023.

DREW, M.L. Retroviral infections. In. THOMAS, N. J. et al. **Infectious Diseases in Birds.** Blackwell Publishing, Oxford, 2007. P. 216-235.

DUARTE, J.L.C.; BARBOSA, F.M.S.; SAMPAIO, R.A.G.; OLIVEIRA, R.L.; LUCENA, R.B.; PAVARINI, S.P.; BANDINELLI, M.B.; ARAÚJO, J.L. Cutaneous hemangiosarcoma in a Buff-throated saltator (Saltator maximus) with lung metastasis. **Braz J Vet Pathol,** v. 14, n. 2, p. 107-110, 2021. DOI: 10.24070/bjvp.1983-0246.v14i2p107-110

GRONDAHL, A.M.; JANSEN, J.H. Juvénile (capillary) hemangioma in a standardbred foal. **Equine Pract,** v. 13, p. 7-10, 1991.

HARTUP B.K.; STEINBERG, H. Osteosarcoma in an American robin (Turdus migratorius). **Avian Dis,** v.40, n. 4, p. 9,38-940, 1996. DOI: 10.2307/1592321

HENDRICK, M.J. Mesenchymal tumors of the skin and soft tissues. In. MEUTEN, D.J. (Ed). **Tumors in Domestic Animals,** 5. ed. Willey Blackwell, Oxford, 2017. p 142-175.

IRIZARRY-ROVIRA, A.R.; LENNOX, A.M.; RAMOS-VARA, J.A. Malignant melanoma in a Zebra finch (Taeniopygia guttata): cytologic, histologic, and ultrastructural characteristics. **Vet Clin Pathol,** v. 36, p. 297-302, 2007.

JAVDANI, M.; HASHEMNIA, M.; NIKOUSEFAT, Z.; GHASEMI, M. Extraskeletal osteoma in a Canary (Serinus canaria). **Vet Res Forum**, v. 8, n. 3, p. 265-268, 2017.

LIMA, S,R.; MORGADO, T.O.; BEZERRA, K.S.; BOABALD, F.M.; HAMIRO, S.; SILVA, L.A.; COLODEL, E.M.; ANTONIASSI, N.A.B. Hemangiosarcoma in a free-living Rufous-bellied thrush (*Turdus rufiventris*). **Acta Scien Vet**, v. 44, n. 1, p. 153, 2016. DOI: 10.22456/1679-9216.84117

MELLO, D.; MELLO, G.; MALLET-RODRIGUES, F.; ALEXANDRE, H.M.; LIMA, L. (org). **Aves do Sudoeste do Brasil** – Guia de Identificação. 2. ed.. Rio de Janeiro, Irmãos Mellos Livros, 2020.
-NAKANO, Y.; UNE, Y. Hemangiosarcoma with widespread metastasis that originated on the metatarsal pad of a Java Sparrow (Padda oryzivora). **J Vet Med Sci**, v. 74, n. 5, p. 621-623, 2011. DOI: 10.1292/jvms.11-0400

PALMIERI, C.; CUSINATO, I.; AVALLONE, G.; SHIVAPRASAD, L.; SALDA, L.D. Cloacal fibrosarcoma in a Canary (Serinus canaria). **J Avian Med Surg,** v. 25, n. 4, p. 277-280, 2011. DOI: 10.1647/2010-047.1

REAVILL, D.R. Tumors of pet Bird. **Vet Clin Ex Animal Pract,** v. 7, n. 3, p. 537-560, 2004. DOI: 10.1016/j.cvex.2004.04.008

Rossi G, Ceccherelli R, Piersigilli A, Tarantino C (2003) Sertoli cell tumor associated with Polyomavirus infection in a Gouldian finch (*Erythrura gouldiae*). Avian Dis 47:240-243, 2003.

SOARES, N.P.; MEDEIROS, A.A.; SZABÓ, M.P.J.; GUIMARÃES, E.C.; FERNANDES, L.G.; SANTOS, T.R. Hemangiomas e hemangiossarcomas em cães: estudo retrospectivo de 192 casos (2002-2014). *Ciên Animal Bras,* v. 18, p. e-30889. DOI: 10.1590/1089-6891v18e-30889

LITERÁK, I.; ŠMÍD, B.; VALÍČEK, B.L. Papillomatosis in Chaffinches (Fringilla coelebs) in the Czech Republic and Germany. **Vet Med,** v. 48, n. 6, p. 169-173, 2003. DOI: 10.17221/5765-VETMED

TANIMOTO, T.; OHTSUKI, Y. Hepatic haemangioma in a pig. **Vet Rec,** 131:176-177, 1992.

URRACA, V.H.; SALINAS, E.M.; GONZÁLEZ, E.C.; GODOY, F.D.S. Mixed thymoma in an American robin (Turdus migratorius). **J Avian Med Surg,** v. 32, n. 3, p. 226-231, 2018. DOI: 10.1647/2017-262

VERMUNT, J.J.; THOMPSON, K.G. Haemangiosarcoma in a 4-month-old calf. **New Zeland Vet J**, 49:120-121, 2001.

WADE, L.L.; POLACK, E.W.; O'CONNELL, P.H.; STARRAK G.S.; ABOU-MADI, N.; SCHAT, K.A. Multicentric lymphoma in a European starling (Sturnus vulgaris). **J Avian Med Surg,** v. 13, n. 2, p. 108-115, 1999.

WERNER, P.R.; CHIQUITO, M.; PACHALY, J.R. Estudo retrospectivo das neoplasias diagnosticadas em animais selvagens ou exóticos pelo Serviço de Patologia do Hospital Veterinário da Universidade Federal do Paraná entre 1974 e 1996. **Arch Vet Scienc,** v. 3, n. 1, p. 39-44, 1998. DOI: 10.5380/avs.v3i1.3737