



C. Pigoli*
I. Karaman*
E. Brambilla†
V. Grieco†
L.R. Gibelli*
A. Bianchi*

*Istituto
Zooprofilattico
Sperimentale
della Lombardia e
dell'Emilia-
Romagna,
Brescia, IT

†Dipartimento di
Medicina
Veterinaria e
Scienze Animali,
Università degli
Studi di Milano,
Lodi, IT

OVARIAN TERATOMA IN A FREE RANGING ROE DEER (*Capreolus capreolus*)

INTRODUCTION

Ovarian teratomas (OTs), rare neoplasms composed of endodermal, mesodermal, and ectodermal derived elements (DEs), can occur in various species, including wildlife.^{1,2} However, there is limited knowledge about the occurrence of OTs in deers, with only 3 cases reported in the Roe Deer (RD) [*Capreolus capreolus*].³⁻⁵ Here, we describe an OT in an RD.

MATERIALS AND METHODS

A 3-year-old free-ranging female RD in poor condition, with low adipose deposits, was found dead and subjected to necropsy, revealing a pathological condition in the right ovary that was sampled for histopathology.

RESULTS

The right ovary, measuring 27 cm in maximum diameter and weighing 3.3 kg, appeared cocooned and polycystic, compressing the uterine horn where a partially lytic fetus was present (**Fig. 1**).

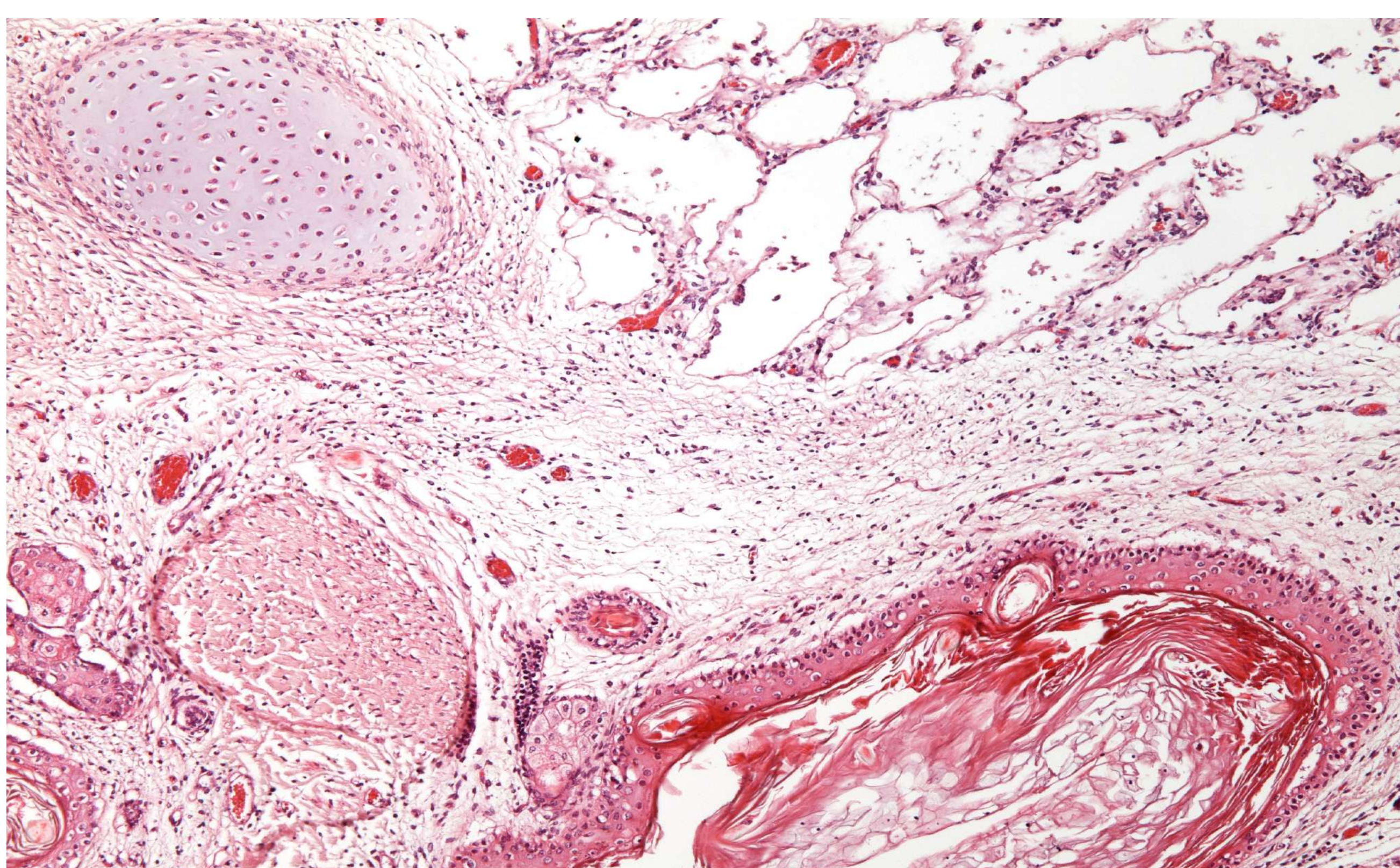
Histologically, the ovary was replaced by a variably cellular, well-demarcated, multilobulated, and polycystic unencapsulated neoplasm with expansive growth and consisting of tissues derived from endoderm, mesoderm, and ectoderm (**Fig. 2**). The endodermal DEs were squamous and columnar epithelial cells, delimiting alveolar and bronchiolar structures, respectively. The mesodermal DEs comprised myxoid, fibrous, and cartilaginous connective tissue. The ectodermal DEs included epidermal tissue, delimiting large cysts containing abundant lamellar keratin. Numerous pilosebaceous units, frequently containing hair shafts, radiated from these cysts. One mitosis was observed in 2.37 mm². A diagnosis of OT was made.

FIGURE 1



Roe Deer, Ovarian Teratoma. The right ovary was replaced by a cocooned polycystic neoplasm.

FIGURE 2



Roe Deer, Ovarian Teratoma. The neoplasm was composed of endoderm-, mesoderm- and ectoderm-derived elements.

CONCLUSIONS

OTs are rare neoplasms derived from pluripotent cells rarely described in wildlife. Further reports will be useful to better understand the incidence, cause, and impact of reproductive neoplasms, including OTs, in wild ungulate populations.

BIBLIOGRAPHY

- Jubb, K. V. F., Kennedy, P. C., & Palmer, N. (2012). Pathology of domestic animals. Academic press.
- Terio, K. A., McAloose, D., & Leger, J. S. (Eds.). (2018). Pathology of wildlife and zoo animals. Academic Press.
- Rang H. (1979). Teratom beim Reh. Deutsche Tierärztliche Wochenschrift 86, 196.
- Pewsner M, Origgi FC, Frey J, RyserDegiorgis M.P. (2017). Assessing Fifty Years of General Health Surveillance of Roe Deer in Switzerland: A Retrospective Analysis of Necropsy Reports. PLoS ONE 12(1): e0170338.
- Draganov D & Bischof J. (1981). Dental malformations and ovarian teratoma in a roe deer. Veterinarstvi 31, 324-325.

