DIPROSOPUS
- origins and development -

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ABSTRACT

Being an uncommonly occurring malformation in both human and animal species, Diprosopus entails both a challenge and a veritable topic for future research, due to an increasing incidence during the last decade, especially in young cattle and lambs as well as in swine and feline, the latter receiving the name of Janus cats.

Also known as craniofacial duplication, this is an abnormality characterized by the presence of two faces attached to a unique cranium, supported by a single trunk, past researches having included it as a form of conjoined twins. The etiology of this disease, in a partially solved state, supported the importance of mutagenic agents, physical and chemical ones, upon the mother, especially during the early phases of embryo development, as a determining factor in causing such abnormalities. Although this theory has been proven viable to a certain degree, recent studies tend to attribute the disease etiology to the abnormal activity of the SHH protein.

The purpose of this study is to highlight the various ways that diprosopus can manifest itself in different species, including mankind, while also searching for a model that can explain both its origins and its incidence. Throughout this research 7 cases are presented, which detail the main characteristics of Diprosopus, in different species, while also highlighting findings achieved through multiple techniques, such as histological, radiological and necropsy exams, establishing a clear distinction between it and similar abnormalities.

KEYWORDS
Diprosopus, craniofacial abnormaly, mutagenic agents, SHH protein
REFERENCES


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