



## Congenital Anomalies in Animals

**Ibrahim A\***

Anesthesiology, and Radiology, Veterinary Teaching Hospital, Assiut University, Egypt

**\*Corresponding author:** Ahmed Ibrahim, Assistant Consultant of Surgery, Anesthesiology, and Radiology, Veterinary Teaching Hospital, Faculty of Veterinary Medicine, Assiut University, Assiut 71526, Egypt, Email: elgrah38@gmail.com

### Editorial

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### Editorial

Congenital anomalies have been defined as structural defects that arise at birth. Genetic and environmental factors play as predisposing factors for such abnormalities [1]. Such congenital deformities usually result from interactions between the animal's genetic makeup and the environment in which it lives [2]. The genetic variables may have an influence early (the first two weeks of pregnancy), whereas the environmental factors may arise later [3].

The incidence of congenital malformations in animals represents 2 % to 3.5 % of all births. The musculoskeletal system-associated defects constitute about 24 % of all malformations. Moreover, such anomalies threaten animal welfare due to reduced productivity and reproductivity of farms and consequently an economic loss [4]. Congenital tumors are characterized by their occurrence early in life, in fetuses and newborns [5]. These tissues are derived from more than one of the embryonic germ layers [6]. External factors such as massive manipulation during pregnancy diagnosis in the early stages of gestation or a cumulative effect of ingested toxic plants or radiation may have teratogenic effects and reduce the likelihood of genetic factors [2,7].

Congenital anomalies like perineomelia, atresia ani, rectovaginal fistula, brachygnathism, and oronasal fistula have been described in literature [8-10]. The surgical correction of congenital defects in malformed animals plays a vital role in rescuing these animals and minimizing economic losses by elongating their survival rate. However, putting these animals for reproduction in animal farms again is contraindicated as such congenital defects due to gene mutations may be inherited from the parents [2].

Proceedings must be applied through animal research centers to reduce environmental pollution, the main

producer of genetic mutation, and the development of different congenital anomalies in animal livestock. Moreover, a full clinical description of such cases can be helpful for practitioners for accurate diagnosis and ideal interference.

### References

1. Blowey RW, Weaver AD (2011) Congenital disorders. In Color atlas of diseases and disorders of cattle. Elsevier Ltd, pp: 1-11.
2. Greene HJ, Leipold HW, Huston K, Noordsy JL, Dennis SM (1973) Congenital defects in cattle. Irish Veterinary Journal (27): 37-44.
3. Aiello SE (1998) Congenital and inherited anomalies. In: 8<sup>th</sup> (Edn.), Merk veterinary manual, USA, Merk & Co, Whitehouse station, pp: 449-455.
4. Leipold HW, Huston K, Dennis SM (1983) Bovine congenital defects. Adv Vet Sci Comp Med (27): 197-271.
5. Misdorp W (2002) Congenital tumours and tumour-like lesions in domestic animals. 1. Cattle A review. Vet Q 24 (1): 1-11.
6. Mahour GH (1988) Sacrococcygeal teratoma. CA Cancer J Clin 38 (6): 362-367.
7. Albarella S, Ciotola F, Anza E, Coletta A, Zicarelli L, et al. (2017) Congenital malformations in river buffalo (*Bubalus bubalis*). Animals 7(2): 9.
8. Ibrahim A, Ali MM (2018) Surgical Manipulation of Dorsal Thoracolumbar Massive Presumed Teratoma in a Buffalo-Calf: Clinical Findings and Differential Considerations. J Anim Sci Res 2(2): 1-3.

9. Ali MA, Ibrahim A (2018) Successful surgical intervention for a congenital perineomelia associated with atresia ani and rectovaginal fistula in a cow-calf. Med J Clin Trials Case Stud 2 (1): 1-5.
10. Abdelhakam MS, Abdelbaset AE, Ibrahim A (2022) Parrot Mouth and Oronasal Fistula with a Presumed Teratoma Hanging from the Soft Palate in a Cattle Calf. Journal of Advanced Veterinary Research 12 (3): 318-320.

