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CONGENITAL ACEPHALIA AND APROSOPIA MONSTER
OF A DELIVERED FEMALE LAMB
(WALRUS HEAD LAMB)

(With 3 Fig.)

By

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تشوهات خلقية لمسح أنثى غنم في منطقة الرأس والوجه

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تم في هذا التقرير وصف الفحص الأكلينيكي والرايولوجي والتشريحي لمسح نادر من الأغنام ووجد أن التشوهات الخلقية تتمركز في منطقة الرأس الضامرة والتي تشبه رأس كلب البحر ومحاطة بأنسجه رخوه ولقد تبين الاختفاء الكلي للعين والأذن والأنف والفم. كذلك لوحظ الصلع المحصور للجسم.

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SUMMARY

In the present report, the clinical, radiological and necropsy findings of a rare ovine monster were described. These examinations revealed that the congenital abnormalities were localized on the head region (walrus like head). The vestigial head was embedded into the surrounding soft tissues and skin. It was cleared that the eyeballs, ears, nose, mouth cavity and their adnexia were absent. The skin of the involved monster showed localized areas of alopecia.

HISTORY

Twin lamb fetuses were delivered per vagina. The first one was normal while the second was delivered after 12 hours with a complex congenital abnormality of the head region.

CLINICAL DESCRIPTION

The delivered monster was a female. The skin showed a localized areas of alopecia (baldness). The head region was characterised by complete absence of the head (acephalia) and face (aprosopia). The neck region was enlarged and cystic in manipulation. The buccal cavity showed complete absence of its bony structure (maxilla, mandible and teeth) and soft structure (tongue, soft and hard palate and teeth). The eyeball and its adnexia were completely absent (anophthalmia). There were two small circular shrunken skin areas representing the eyelids. The ears were represented by two small ear like conchae without external ear canal. These ear like conchae were displaced from their normal anatomical position to the level of the nostril. The nasal bone was absent and the nostrils were present as two blind folds ventral to the ear like conchae. Two wattles were present at the upper third of the neck (fig. 1a, b & c).

Radiological feature:

Dorsoventral and lateral radiographs of the head and neck regions revealed presence of irregular rudimentary skull (snake like head) embedded in the surrounding soft tissues. The mandibular bone and maxilla were completely absent. The frontal bone appeared as a triangular radiolucent area. Sutures of the cranial bone were observed as radiolucent lines. The orbital bones and cavities were completely absent. Two circular radiopaque areas represent the tympanic bulla were present in front of the occipital bones. Two small and fine bones represent the hyoid bones were observed (fig. 2 a & b).

Necropsy finding:

Dissection of the skin at the head and neck regions revealed escape of colourless, viscous honey like fluid arising from the oesophagus. The oesophagus was dilated and opened directly under the skin. The opening of the thoracic cavity showed a collapsed lung which was attached with normal trachea and larynx. The position and morphological appearance of the heart was normal. All viscera inside the abdominal cavity appeared normal. The maceration of the vestigial skull revealed the anatomical drawing of the eye facet, the site of the nasal bone and openings, maxillary, mandibular and cranial bones. The ventral aspect showed two tympanic bullae and occipital condyles (fig. a & b).

Conclusion:

Congenital defects or diseases are abnormalities of structure or function present at birth. They may affect a single anatomic structure or function of an entire system or both (LEIPOLD and DENNIS, 1986). From the available literature, the defects of the musculoskeletal system are most common congenital abnormalities in farm animals. Congenital defects of the head, ear, anophthalmia and microphthalmia of cat fetuses are reported by ELZAY and HUGHES (1969). Congenital abnormalities at the head of a newly born goat including hydrocephalus, cyclopia and prognathism are recorded by ALI et al. (1987).

KAHRS et al. (1970) reported congenital cerebellar hypoplasia and ocular defects following viral diarrhoea mucosal infection in pregnant cattle. ROBERTS (1982) described several congenital defects affecting bovine reproduction and their suspected etiological factors. Calves of prolonged gestation showed various forms of congenital abnormalities as skin hypotrichosis, achondroplasia, acromegaly, hydrocephalus and jaw lesions. Most of the calves are dead on delivery or within few days of birth (ARTHUR et al., 1989).

In the present record, the clinical, radiological and necropsy findings revealed that the congenital defects were localized in the skin and the head region. Four sense organs including visionary, auditory, smelling and taste were completely absent which considered a rare case in ovine

LEGENDS

Fig. 1 a : Twin of an ovine monster deprived of the head and face. The neck is enlarged and cystic. The skin is characterised by a localised baldness. Two wattles are present.

- Fig. 1 b** : Lateral profile showing two earlike conchae displaced at the level of the nostrile like fold.
- Fig. 1 c** : Cranial view showing the absence of the eyeball, nose, ears and mouth cavity.
- Fig. 2 a&b**: Lateral and dorsoventral radiographs showing vestigeal skull without anatomical features. C. cranial bone, H. hyoid bones, O. occipital bone, T. tympanic bones. 1-7 cervical vertebrae.
- Fig. 3 a&b**: Ventral and dorsal view of the macerated bone showing the two tympanic bone and complete absence of all sense structure in the skull.

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LEGENDS

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CONGENITAL ACEPHALIA, APROSOPIA MONSTER & lamb

Fig. 1 A

A

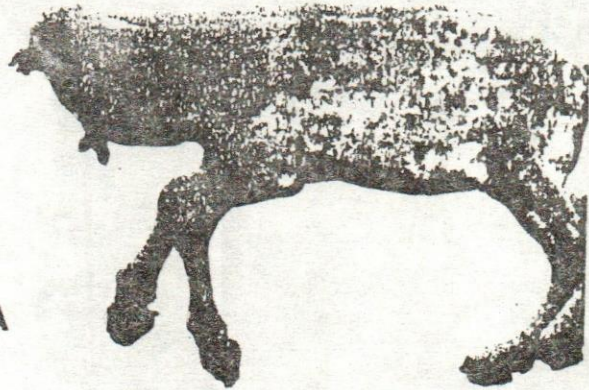


Fig. B

B



Fig. 1 C

C



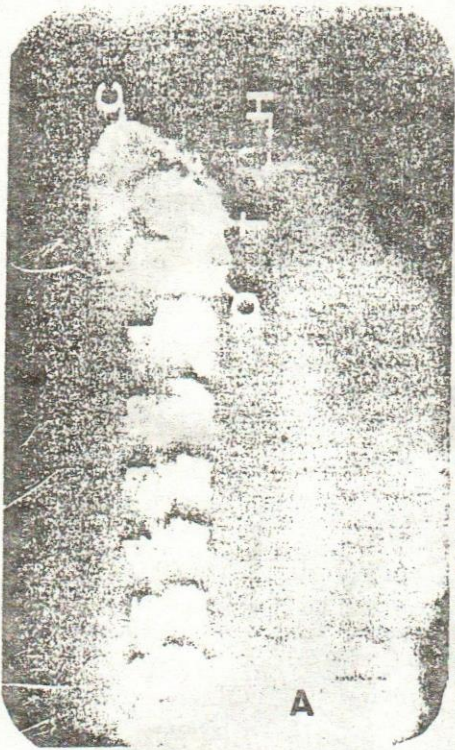


Fig. 2 A

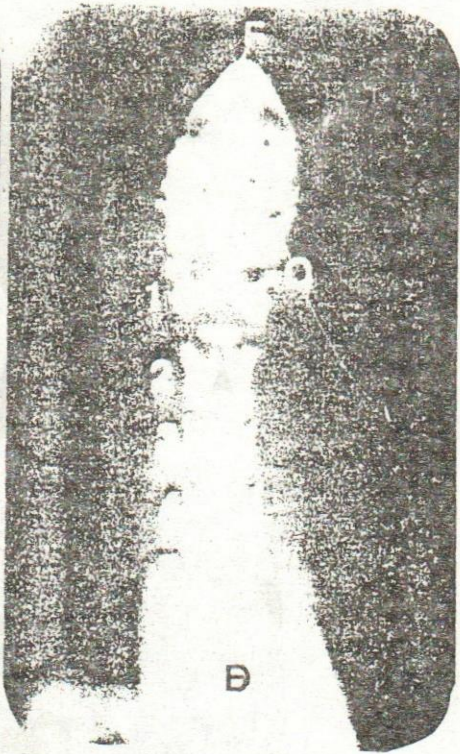


Fig. 2 B

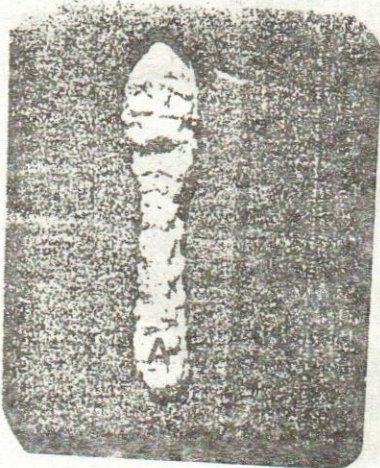


Fig. 3 A



Fig. 3 B