

### CYCLOPIA (CASE REPORT)

W. A. Khamas, A. A. J. Flaih and Th. A. Abbas,  
College of Veterinary Medicine, Baghdad  
University, Baghdad, Iraq.

Cyclopia is a congenital defect in which the two orbits merge to form a single cavity containing one eye, which is likely to show more or less evidence of its origin by fusion of the right and left optic primordia. It is usually combined with cyclencephaly. It is usually described as synophthalmus.

A dead full-term sheep fetus was collected from Najaf slaughter house in December 1986. The fetus showed typical appearance of partial cyclopiian defect. On dissection in the laboratory, it was observed that external nares were absent with well developed hard palate and nasal cavities, while the upper jaw was distorted (Fig.1).

The two eyes were partially fused externally (Fig. 2) with semilunar septum composing both sclera and choroid extend back half the way between the two cavities. One irregular optic papilla was noticed with partially fused optic nerves. Other parts of the eye were apparently normal and there were no hydrocephalous, cyclencephaly or fusion of parts of the brain.

The defect was described in North America and other parts of the world as related to the consumption of fresh or dried plant *Veratrum Californicum* or one of its



Fig.1. A full-term fetus with cyclopia. Notice the deformity of the maxilla and nasal bones.

alkaloids by the ewe during her thirteenth to fifteenth days of pregnancy and was first described as occurring in sheep pastured on mountain ranges in Southern Idaho located at altitudes up to 10,000 feet (Binns *et al.*, 1963 and 1969). In Iraq, however, this defect could be due to the consumption of similar plants containing alkaloids or the use of drugs during the early stages of pregnancy.



Fig.2. Enlarged photograph of Fig.1.

#### REFERENCES

- Binns, W., James, L. F., Shupe, J. L. and Everett, G. (1969). A congenital Cyclopian-type malformation in lambs. *J. Am. Vet. Ass.* 134: 180-183.
- Binns, W., Thacker, E.J., James, L. F. and Huffman, W. T. (1963). A congenital Cyclopian-type malformation in lambs induced by maternal ingestion of a range plant, *Veratrum Californicum*. *Am. J. Vet. Res.* 24: 1164-1175.
- Smith, H. A., Jones, T. C. and Hunt, R. D. (1972). *Veterinary pathology*, 4th Ed., Lea & Fibeger, Philadelphia, pp. 971-974.