A RARE CASE OF SCHISTOSOMUS REFLEXUS IN THE CAT

Keiichiro KAWATA and Tosiro TIBA

Department of Veterinary Obstetrics,
Faculty of Veterinary Medicine,
Hokkaido University, Sapporo, Japan

(Received for publication, Oct. 15, 1961)

According to several references[1,6] and books[2-5,7,8] in veterinary obstetrics, the occurrence of schistosomus reflexus is most common in the cow but is comparatively rare in the sheep, goat and pig. Only one atypical case has been observed in the horse[6]. On the other hand, no case of schistosomus reflexus has been reported in Carnivora.

In the present report, a presumably first case of schistosomus reflexus in the cat will be described.

The mother of this monster was a cat about eight months old. She came to our hospital June 2, 1960, being in labor with dystocia. A piece of the intestine of a fetus was seen from the vagina of the dam. By cesarean operation two mature fetuses were obtained from the uterus; one of them was a normal live male fetus but the other was a dead female fetus characterized by the following deformities (see Fig. 1). The abdominal wall of this fetus was ruptured; the liver and most of the digestive organs were exposed in the uterine cavity of the dam. The spinal column was distinctly curved ventrally and both hind legs were extremely ankylosed. The thoracic cavity was not exposed. From these observations this fetus was diagnosed as schistosomus reflexus.

In addition to these two mature fetuses, there were observed two very small immature fetuses, each enclosed by an amnion which was embedded in its own placenta. The size of each small fetus was about 1.5 cm in length and the size of the amniotic vesicle was about 5 cm by 4 cm. The amniotic fluids were transparent and these fetuses were not degenerated (see Fig. 2).

As for the causes of schistosomus reflexus, WILLIAMS stated that this monstrosity has its origin in an abnormal development of the vitelline duct. This condition has been considered to be a non-inherited anomaly by many authors, but recently in Germany RICHTER and GÖTZE have suggested that some hereditary factors may possibly be related to the development of schistosomus reflexus, on the basis of the fact that eight cases of schistosomus reflexus were produced in different herds sired by the same bull. In the present authors' case, however, no information was

FIG. 1, *A schistosomal monster and its placenta*
(scale : cm)

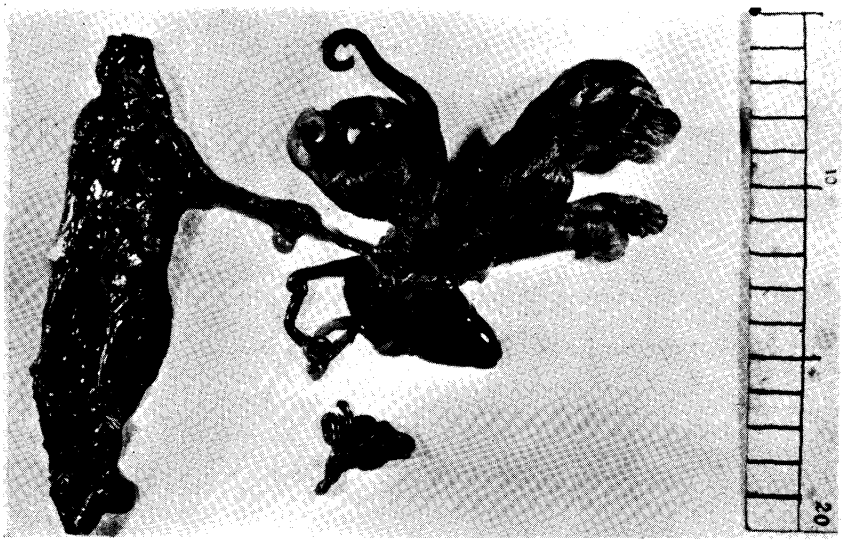
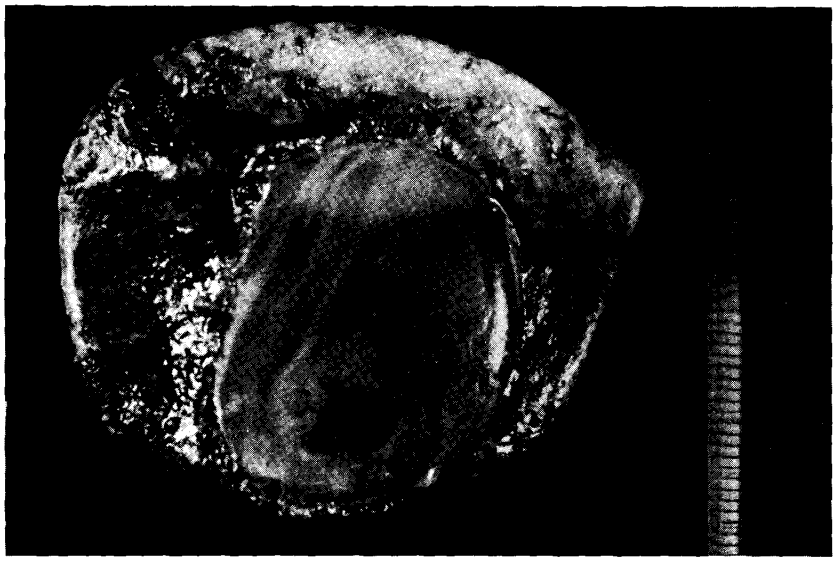


FIG. 2. *A placenta with an amnion including an immature fetus*
(scale : cm)



obtained as to whether a hereditary factor might have been concerned or not.

It is uncertain whether the small, immature fetuses associated with the present case were due to superfetation or not. However, it is apparent that these four fetuses, including the schistosomal monster, developed from separate ova, because two corpora lutea of almost equal size were observed in each ovary of the dam.

REFERENCES

1) BACHMANN (1954): *Dtsch. tierärztl. Wschr.*, **61**, 423.
2) BENESCH, F. (1957): Lehrbuch der tierärztlichen Geburtshilfe und Gynäkologie, 2te Aufl., München: Urban & Schwarzenberg.
3) BENESCH, F. & J. C. WRIGHT (1960): Veterinary Obstetrics, 2nd ed., London: Baillière Tindall & Cox.
4) RICHTER, J. & R. GÖTZE (1960): Tiergeburtshilfe, 2te Aufl., Berlin: Paul Parey.
5) ROBERTS, S. J. (1956): Veterinary Obstetrics and Genital Diseases, Ithaca, New York: Published by the author.
6) SCHÖTTLER (1922): *Berl. tierärztl. Wschr.*, **38**, 491.
7) STOSS, A. O. (1928): Tierärztliche Geburtskunde und Gynäkologie, Stuttgart: Ferdinand Enke.
8) WILLIAMS, W. L. (1950): The Diseases of the Genital Organs of Domestic Animals, 3rd ed., Worcester, Mass.: Published by Ethel Williams Plimpton.