

frozen and submitted to the Animal Diseases Research Institute. The virus was not recovered from any of the blood serum, neither was there any indication of neutralizing antibodies on the hæmagglutination inhibition or serum neutralization tests.

It may be of interest to note that another woman, from whose birds the virus of Newcastle disease was recovered, also reported an intense conjunctivitis. This lady did not seek medical assistance but she did contribute a blood sample for examination upon request. The sample was taken approximately twenty-two days after the chicks were found infected. A slight degree of neutralizing activity against the virus of Newcastle disease was found in this specimen.

Previous to hospitalization, the patient had become suspicious of Newcastle disease, or other severe infection, in her flock. Her means of control consisted of killing all the birds on the farm. Unfortunately, only three birds could be obtained for examination and these consisted of specimens from her old group of birds. Specimens from these were submitted to the Animal Diseases Research Institute but the virus of Newcastle disease could not be recovered.

DISCUSSION

The fact that Newcastle disease virus could not be isolated from the three chickens examined does not rule out infection taking place on the farm. There is a possibility that these particular birds were not actively infected, or that they had been infected sufficiently long to overcome the virus. The isolation of the virus from conjunctival washings appears to leave little doubt of the causative agent of the patient's illness.

Mitchell and Walker⁵ indicate that the route of entry of the virus dictates the course of symptoms rather than just a predilection for conjunctival mucous membrane. Considering this, the first patient noted may possibly have introduced the virus into the conjunctiva and may also have ingested or inhaled the infective material.

SUMMARY

A case report is given of Newcastle disease of poultry affecting a woman fifty-six years of age, infection occurring by contact with poultry in the field. The symptoms were severe conjunctivitis, headache and malaise. The virus of Newcastle disease was recovered from conjunctival wash-

ings but a series of three blood serum examinations revealed no virus or neutralizing antibodies.

We would like to express our thanks to Drs. R. V. L. Walker, C. A. Mitchell of the Animal Diseases Research Institute, and Dominion Science Service for the work of virus isolation and serological examination of this case.

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BICORNUATE UTERUS

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CASES OF PREGNANCY in a bicornuate uterus are still of sufficient interest and rarity to justify being reported.

In order that a clear idea may be had of the abnormalities of the genital tract, brief reference will be made of their embryo-genesis. The Wolffian body and Muller's duct play the most important part in the development, as it is from these structures that the female generative organs are developed. The time at which the arrest in the development of the uterus takes place, determines the degree of abnormality. Thus, if the development is arrested before the 12th week and the ducts of Muller do not fuse together, a duplication of the uterus results. If the fusion of the ducts occurs shortly after that period, a bicornuate uterus is formed and, if the development is arrested or in any way interfered with at a later period, the uterus assumes the undeveloped fetal type occasionally met with in gynæcological practice. Other factors sometimes materially retard development of these organs, such as malposition, nervous conditions, etc. Complete absence is quite rare and not always detected in life.

In 1842, Rokitansky reported what he thought was the first case of pregnancy in the rudimentary horn, but Kussmaul, in 1859, in his classical work, drew attention to 12 cases, the first of which belonged to Dionis in 1681 and which was found at autopsy, when a rudimentary horn with a gestation sac was observed.

As long as normal development occurs there may not be any abnormal features. The horn containing the gestation sac enlarges with the

pregnancy, while the other horn, if felt, might be considered to be a fibromyoma. Malformation of the vagina such as a septum, may draw closer attention to the uterus. In gravida 2, the uterus will generally be found to be considerably larger than the menstrual history would indicate.

The differential diagnosis is between:

1. Threatened miscarriage—vaginal bleeding due to separation of the decidual cast is likely to cause confusion.

2. Twisted ovarian pedicle—this diagnosis might result when there was torsion of the gravid rudimentary horn or when it was prolapsed into the pouch of Douglas.

3. Spontaneous rupture of a normal pregnant uterus—this is a rare condition, but an occasional case has been reported.

4. Secondary abdominal pregnancy—when a pregnancy in a rudimentary horn goes to term and is followed by a spurious labour, with death of the fetus, it may be retained for a varying period. Previous history of vaginal bleeding due to separation of the decidual cast is likely to be mistaken as evidence of rupture of primary tubal pregnancy and the presence of an abdominal tumour, showing x-ray evidence of lithopedion, is diagnosed as evidence of a secondary abdominal pregnancy.

The patient, age 26, gave the following history. Menses began at 10 years of age, with marked painful flow for 2 weeks. About one year later these periods lengthened to 3 weeks in duration. At 15, periods became more regular, 28 days, and lasted for 8 to 9 days. At 18, she married and 3 months later became pregnant. During the latter part of the 3rd month of pregnancy, she expelled a fetus, but the uterus continued to grow and at the end of the 9th month she gave birth to a normal child, after a thin and apparently bloodless medial septum was removed from the vagina. The pregnancy was carried in the right horn.

About 7 years later, this patient first consulted me about prolonged periods of 10 to 12 days. The above history was reviewed and she was advised to have another child and then consider surgical help. And so, in April of 1950, she was delivered, this time from the left horn, of a normal child. The septum between the two horns could be felt at the time of delivery, at the level of the internal os, and was about 3 to 4 mm. in thickness. The delivery was of short duration, 1½ hours, with outlet forceps. Hæmorrhage, however, was encountered, which required packing of the left horn, and blood transfusion, as the Hgb. had dropped to 62%, Sahli. It appeared to me that the right horn approximated the size of the left horn at the time of delivery. After the first 24 hours, a normal post partum period ensued.

In September, she again consulted me with the complaint of very heavy flow, heaviness in the pelvis, weakness and tiredness. This was evident from the secondary anæmia that was present. Bimanual examination revealed a uterus about the size of a grapefruit, yet no periods had been missed.

On September 14, she was operated upon, at which time a bicornuate uterus was encountered, together with a hydrosalpinx of the right side. A panhystero-salpingectomy, bilateral was performed.

Pathological report.—Specimen consists of a bicornuate uterus and cervix. The septum in the fundus extends as far as the internal os. The cervix contains a cyst filled with mucoid material, measuring 5 cm.

Sections of myometrium shows a mild increase in fibrosis. The endometrium is very thick. The glands are in the secretory stage. Section of cervix is covered with stratified squamous epithelium, in part, and in part with columnar epithelium. There are numerous cervical glands present which appear essentially normal. The surrounding stroma is oedematous and congested. There is no evidence of malignancy.

Diagnosis.—(1) Bicornuate uterus with late secretory endometrium. (2) Chronic endocervicitis.

In summary, this is a report of a case of bicornuate uterus with two successful pregnancies, one in each horn. Metrorrhagia required a hysterectomy, at which time the additional finding of a hydrosalpinx of the right side was made.

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A CASE OF BERIBERI WITH ORGANIC CHANGES IN THE HEART*

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PURE THIAMINE DEFICIENCY in man is rare except under experimental conditions. Although Weiss¹ found the incidence of clinical cardiac manifestations of beriberi to be one in 160 medical admissions in Boston, this figure is much higher than is reported in other centres. At the Toronto General Hospital during the years 1948 and 1949 there were some 7,800 medical admissions. Thiamine deficiency was diagnosed in four cases, all of which recovered. Cardiac involvement was strongly suspected in two of these. A fifth case, the subject of this report, was diagnosed at post-mortem.

Cases of deficiency disease rarely come to autopsy. In 2,049 necropsies at the Banting Institute in the last five years only one case of deficiency heart disease has been recorded. Follis² states that confirmed cases of beriberi are rare in the United States. Alleged cases are reported in alcoholics with a dietary insufficiency. Their hearts show myocardial scarring of varying degree and degenerative cellular changes,

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