

suggest an explanation of the separation of the sections, resulting from the presence of intra-uterine inflammation.

But it will be necessary to look beyond this to explain the fibrous condition of a large part of the bowels.

(2) Failure in development. The first formation of the alimentary canal is from the hypoblast. It consists primarily of a simple tube, extending to the anterior extremity of the embryo, and terminating there in a *cul de sac*, extending also to the posterior extremity, and ending there also in a *cul de sac*. These two terminations are common seats of obstruction. At the anterior extremity an involution of the epiblast occurs to meet the closed alimentary tube. Similarly involution occurs at the posterior extremity. A failure to absorb the separating membrane causes the obstruction. This tube of hypoblast represents what is to constitute the mucous membrane only. The muscular and serous coats are formed later from the mesoblast.

For descriptive purposes, the alimentary canal in the embryo is divided into three portions—the fore, middle, and hind gut. The fore gut consists of that section between the buccal cavity and the ilium, viz., the pharynx, œsophagus, stomach, and duodenum, and is a closed tube from the first. The hind gut corresponds to the middle portion of the rectum, and is also closed from the first. The middle gut corresponds to the ilium, jejunum, cæcum, colon, and first part of the rectum. This portion has primarily the form of an open groove, and communicates freely with the cavity of the umbilical vesicle. The groove gradually narrows, and finally a tube is formed which connects with the umbilical vesicle through the ductus vitello-intestinalis.

At first the large is less in calibre than the small intestines. But soon the cæcum begins to form and grows out from the rest.

This growing out of the large intestines occurs about the twelfth week. The ileo-cæcal valve appears at the beginning of the third month.

In the case under consideration the middle gut was a closed tube. But there was no sign of the distinction between large and small intestine; no appearance of the cæcum or of the ileo-cæcal valve, or vermiform appendix, or vitellineduct.

Considering the condition of the facts, therefore, the abnormality would appear to have resulted from an interference with the development of the mid-gut some time during the second month.

In looking for a cause, we realize that very little is known about the causes of failure in development.

Maternal impressions have often been assumed to produce monstrosities and abnormal fetuses. Many peculiar facts have been brought forward in support of this view. But there is no knowledge of a scientific character. The reasoning is entirely *post hoc propter hoc*. To explain the failure to develop in this case we must look to either the nervous or arterial systems. There is a reason for this in the present case. Conception had taken place before marriage. Medicine had been obtained from some source and given for the purpose of producing an abortion. We know nothing of the nature of the medicine. Is it possible that it had caused interference with the blood supply to the mid gut through the superior and inferior mesenteric?

Dr. J. Olmstead presented the following specimens:

(1) FETAL MONSTER.

The foetus was delivered from a woman 35 years old, ten months after marriage. Husband was much addicted to the use of alcohol and was younger than wife.

The monster was anencephalous, with ectopia of the abdominal viscera, exophthalmos, and double talipes equino-varus. Projecting from the centre of the anterior surface of the body is the heart, liver, stomach, spleen, intestines, and right lung. The head is bent back at an angle. There appears to be almost no brain, although fluctuation can be made through the eyes with the part joining on to the spinal column.

He intended making a dissection, and would report further on the case at a future meeting.

(2) ADHERENT PERICARDITIS.

E.R., æt. 60, a porter, colored. Admitted into City Hospital 2nd Oct., 1891, complaining of shortness of breath and weakness.

Family History: Mother died æt. 55, of dropsy. Cause of father's death not known. Two sisters, alive and healthy.