5. I find the internal so often opposite the external ring that I am led to believe that direct inguinal hernia is less frequent than reported.

6. There is little or no shock or pain following the operation, and the patient can be safely allowed out of bed in from three to five days.

301 Marion Block.

AN ANAEROBIC ORGANISM ASSOCIATED WITH ACUTE RHINITIS*

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Many efforts have been made to determine the cause of acute rhinitis, but so far as I am able to learn all the investigations have been made with aerobic methods.

The organism now described has been found during the early stages of acute coryza, while the discharge is mucoid in character. At this time few, often no other, bacteria are present in the smears. The organism is often found in large numbers. As the mucus disappears or the discharge becomes purulent, it decreases in number and finally disappears. It has been observed in all of the cases of acute rhinitis studied. Eighteen different persons have been examined during the acute attack, one during each of four attacks and another during each of five, so that altogether I have made observations during twenty-five distinct attacks. Many examinations were made during the course of the infection in nine of these cases. In the case of an accompanying pharyngitis, tonsillitis or bronchitis, the organism is also found, sometimes in very large numbers in the sputum and mucus of the throat. It was present in small numbers in the nose in five cases examined when the rhinitis was disappearing. It was not found in thirteen normal persons, in one case of suspected syphilis and one case of diphtheria. In only one normal person were a few observed. The same organism has been seen in two cases of chronic rhinitis and was once isolated in pure culture by Dr. George F. Dick.

In order to find the organisms a fair amount of mucus should be spread on a slide and often a large number of fields must be examined. They generally appear in clumps, but may be found separate.

Carbol-gentian-violet and carbol fuchsin are the best stains, but the organism stains rather faintly even with these; it does not stain by Gram's method, methylene blue, thionin or the Giemsa stain. It may be seen by dark-field illumination. Some of the organisms seem to be flexible and possibly move a little, but most of them appear immobile, which may be due to the large amount of mucus present. They vary from 5 to 8 microns in length and from $\frac{1}{3}$ to $\frac{1}{2}$ a micron in width; the ends are pointed or slightly rounded; generally the bodies are slightly curved but may be straight, waved or bent over at one end. Sometimes an enlargement in the form of a ball is seen at one end. An arrangement in bunches also occurs, several organisms radiating from a central mass. A ring is sometimes attached to one extremity.

This organism is a strict anaerobe and grows slowly, at least at first. I have isolated it in pure culture on alkaline goat-blood agar four times; twice from the nose, twice from the throat. The colonies appear in from five days to a month as small, round, dull growths; after several transfers growth becomes more active, and in old cultures the growth becomes thick and greenish yellow

in color. Growth occurs also on dextrose agar, ascites agar, and ascites agar with rabbit-kidney tissue along the stab canal, where it can be seen distinctly, and not merely as a haziness. In plain agar there is but little growth. In dextrose broth there is a flocculent growth.

Examined by dark-field illumination, the organism from cultures is slightly motile but loses motion quickly. Attached to the ends and sides, and also free, are light refractile bodies, the free bodies being very motile.

In cultures the organism measures from 3 to 8 microns in length and from $\frac{1}{3}$ to 1 micron in width. It here stains a little more deeply than in the smears from mucus, but remains Gram-negative and does not stain with methylene blue. Organisms grown on dextrose agar show deeply staining bands.

Morphologically the organisms from cultures look like the organisms found in the smears from the mucus. After long cultivation, however, there is a tendency to become larger, straighter and less bunched; while in the early cultures they are delicate and slightly curved, some very wavy, and some showing a radiating arrangement. Darkly staining bodies are seen, both attached to the ends and sides, and also free; an organism with a ring at one end is occasionally seen. The organism looks like a spirochete, but culturally it seems more like a bacillus, and whether it is a spirochete or a bacillus must be decided later.

During the acute stage of the rhinitis the opsonic index to this organism is low, rising as the infection subsides.

A slight rhinitis has been produced in a human subject (self). A pharyngitis also occurred, the infection beginning six hours after the inoculation and lasting about forty-eight hours. The organisms were present in fairly large numbers in the nose and pharynx eighteen hours after the inoculation and a few were still present until the third day. During this infection the opsonic index fell to .05, rising to 2.6 as the infection disappeared. A slight rhinitis has been produced in a dog also, but no organisms were found in the nose of the dog twenty-four hours after the inoculation.

Whether this anaerobe is the cause of acute rhinitis must be determined by further investigation. My observations show that in the cases of acute rhinitis examined it was present constantly during the early stage of the coryza.

1743 West Harrison Street.

AN ANALYSIS OF 700 CASES OF LABOR*

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For a number of years I have kept a record of obstetric cases occurring in my practice. I have thought a careful study of these might be of general interest. It certainly has been of service to me.

TIME OF DELIVERY

The births have been distributed by months in the following manner:

January.....	.61 births	August.....	.68 births
February.....	.49 births	September.....	.08 births
March.....	.55 births	October.....	.57 births
April.....	.58 births	November.....	.48 births
May.....	.68 births	December.....	.47 births
June.....	.60 births		
July.....	.61 births	Total	700

* A Preliminary Report from the Memorial Institute for Infectious Diseases.

* Read before Jefferson County Medical Society, April 14, 1913.

These results would seem to controvert the popular idea that most babies are born in very cold weather, as by far the larger number of my cases (383) occurred in the months from April 1 to September 30.

Delivery occurred at the following times of day, in three-hour periods:

12 p. m.-3 a. m.... 72 cases	12 m.-3 p. m..... 83 cases
3 a. m.-6 a. m.... 87 cases	3 p. m.-6 p. m.... 88 cases
6 a. m.-9 a. m.... 102 cases	6 p. m.-9 p. m.... 81 cases
9 a. m.-12 m.... 90 cases	9 p. m.-12 p. m. 97 cases

Total a. m.... 351 cases

Total p. m.... 349 cases

Thus there were 337 cases of delivery in the night hours (6 p. m. to 6 a. m.) as against 363 cases in the daylight hours, again controverting public opinion. As a matter of fact, the single hour in which I delivered the greatest number of patients was 11 p. m. to midnight—forty-five cases. The fewest were delivered in the hour noon to 1 p. m.—twenty cases; but the smallest number in any three-hour period was from midnight to 3 a. m., as shown above.

AGES OF THE MOTHERS

With reference to the ages of the mothers, the births are classified according to the following grouping:

Mothers' ages from 13 to 14.....	2 cases
Mothers' ages from 14 to 15.....	2 cases
Mothers' ages from 15 to 17.....	40 cases
Mothers' ages from 17 to 20.....	116 cases
Mothers' ages from 20 to 25.....	223 cases
Mothers' ages from 25 to 30.....	174 cases
Mothers' ages from 30 to 35.....	82 cases
Mothers' ages from 35 to 40.....	41 cases
Mothers' ages from 40 to 45.....	20 cases
Over 45	None

Total..... 700 cases

By far the most prolific period of a woman's life is from 20 to 30, practically four-sevenths of the children being born to mothers between those ages. Nearly one-third are born to mothers between 20 and 25 years of age.

PARITY OF THE MOTHERS

Nearly half of the cases were in primiparae. Of these twenty patients were in the class termed "old," that is, more than 30 years old. Fifteen of them were between 30 and 35 years old. The others were from 35 to 43 years old. The use of forceps is required in a large percentage of these cases, more, I believe, from the large size of the child than from causes connected with the mother.

The next greatest number of cases were secundiparae. I have tabulated them in accordance with the parity of the mothers.

Labors	Mothers	Labors	Mothers
1	330	6	20
2	125	7	17
3	91	8	16
4	52	9	3
5	31	10	7
		11	3
		12	2
		13	3

The preceding table refers to the number of labors, not the number of children born, as in some instances there had been a twin pregnancy. This leads us naturally to the percentage of twin cases. In my seven hundred deliveries there were only eight twin cases, just a fraction over 1 per cent. of the total.

PRESENTATION

Of the 700 cases, 673 were head presentations; 22 were breech presentations; 5 cases were cross or face presentations. Practically speaking, in 96 per cent. of all cases of labor, one will have a head presentation to deal with; in 3 per cent. a breech and a little less than 1 per cent. will be cross or face presentation. I have encountered only two of the latter, one in a twin sac.

The 673 cases of head presentations may be arranged in the following classification according to position:

461 infants (68.5%) presented and were delivered in L. O. A.
58 infants (8.6%) presented and were delivered in R. O. A.
25 infants (3.7%) presented and were delivered in R. O. P.
4 infants (.6%) presented and were delivered in L. O. P.
97 infants (14.4%) presented R. O. P. but rotated to L. O. A.
18 infants (2.6%) presented R. O. P. but rotated to L. O. A.
20 infants (2.9%) presented L. O. P. but rotated to L. O. A.
1 child rotated from L. O. P. to R. O. A.
2 brow cases were converted to vertex.

In the two face cases encountered, the infant in the twin sac presented mento-anteriorly; this was quite a small child and gave no trouble. The other case was a mentoposterior in a multipara and the child was rotated instrumentally to a mento-anterior position and easily delivered. Both children lived. The latter case was seen in consultation.

Podalic version was done in all cross cases, with one exception in which the patient was a multipara; this was easily changed to a head case. Version was done in one head presentation.

In the 22 cases of breech presentations, single labors, the presentation was L. S. A. in 9 cases, R. S. A. in 10 cases, L. S. P. in 1 case and R. S. P. in 2 cases.

In twin cases, both presented head first in 5 cases; both presented breech first in 1 case, and one head and one breech in one case. In one case the occiput presented in one and the face mento-anterior in the other.

COMPLICATIONS OBSERVED

Placenta praevia was met only twice in this series. I have seen several others but they were in consultation cases not recorded here. I have lost none of the patients and have treated by packing until dilatation allowed the use of forceps or a pulling down of a foot. The children are usually still-born.

Hemorrhage of sufficient gravity to cause it to be noted was met in 17 cases. I have found hot intra-uterine douches the best agent to control it. Carcinoma uteri was found in only one case—that of an octipara, 42 years old. There was serious hemorrhage during the period of dilatation, which was rapid and nearly complete when I arrived. Convalescence was normal, but as operative measures were absolutely declined, the patient died a few weeks later. Carcinoma gastrica was a complication in a 35-year-old primipara. She died of this a few months later.

Chorea was present in one case, a sextipara, aged 35. Severe heart disease was noted in six cases. I always use an anesthetic in these cases, believing that there is less danger in the chloroform than there is in the shock to the system without it. A vaginal polyp of sufficient size to interfere somewhat with delivery was found in one case. The pedicle was tied *en masse* and the polyp cut away.

Accidental hemorrhage was met only once; the child was still-born. Complete vaginal septum, obstructing labor, was found in one case. It was longitudinal, forming a double vagina. After complete dilatation of the

os uteri, it was cut and gave no further trouble. This case has been fully reported elsewhere.¹

Acute yellow atrophy of the liver was met only once. Death resulted one week after delivery of a seven months' child, in a quartipara, aged 32. Severe varicose veins of the vulva were encountered in three cases. Procidencia uteri, the cervix being completely outside of the vulva, was found in one case.² Pin-hole os uteri in one patient, a primipara, aged 35, was immediately relieved by incision.

Three mothers were idiots; one was blind and two were deaf mutes; two were habitual morphin fiends; three were epileptics; two had Bell's palsy. Laparotomy was done for appendicitis during pregnancy—third month—in one case, with no bad results except to necessitate the use of forceps in delivery. The uterus had been previously suspended in one case and this fixation so interfered with uterine action as to render it necessary to use forceps to complete delivery.

Narrow pubic arch was noted in three cases. Protruberant sacrum was present in one case. Flat pelvis was noted six times. Fist or hand displaced delayed labor in three cases.

Eclampsia was encountered in twelve cases; practically all of these were in consultation work. I have seen a number of other cases of eclampsia, eighteen in all, but for various causes only twelve of these are recorded here; only one case has proved fatal and that woman was comatose fourteen hours before any physician was called. I use veratrum viride with a bold hand and dilate manually and apply forceps.

Very precipitate labor was noted in six cases. Hemorrhage is to be feared in these cases. Menstruation during pregnancy was noted in several cases, in one of which it was so regular and normal in every respect that the woman did not suspect that she was pregnant until she felt the child move.

Dry labor, or the early rupture of the membranes, is often a cause of slow labor. I have noted sixteen cases in which this occurred from twelve to forty-eight hours before labor set in; eight cases in which it was more than forty-eight hours before labor began after their rupture. In one case it was forty-six days. This case was reported.³ Hydrops Amnii was noted in three cases. Relaxed symphysis pubis was very marked in two cases. In sixty-eight cases with the occiput anterior in fourteen with the occiput posterior, and in one mentoposterior it was found necessary to use forceps. In eleven of the occipitoposterior cases instrumental rotation was done, to anterior position; in the mentoposterior case the child was easily rotated to the anterior position and delivered. The forceps was applied to the after-coming head four times and to breech and after head in one case and to breech alone in one case.

A very short cord sometimes delays labor. In two cases I found it only 7 inches long. It was so short and about the neck in nine cases that it was broken at delivery as the head was expelled. The cord was around the neck one time in 130 cases, two times in twenty-four cases, two times around the neck and once around the arm, leg and body in one case each. It was around the neck three times in two cases; around the neck four times and the body one time, in one case; around the neck, arm and body in one case and around the body and arm in one case. A distinct knot was in the cord in three cases. Prolapse of the cord was noted

three times. I have succeeded in replacing and delivering these cases by pushing up the cord and pressing the head well down. In one set of twins the cord came off from the same placenta by a common stem and divided about two inches from the abdomen. In the other seven cases, cords and placentae were distinct. In the one case there was only one sac.

Placenta succenturiata was noted three times; adherent placenta, requiring forcible detachment in five cases. Severe infection occurred in one case but the woman recovered after a long siege. Hour-glass contraction on the detached placenta caused some trouble in two cases. Hematoma vulvae, a very rare condition, occurred once. This case has been reported fully.⁴

Broadly speaking, perineal lacerations occur in all primiparae; exceptions are few. Likewise, cervical lacerations occur in all cases, regardless of how many children have been borne. All perineal lacerations, regardless of their depth, should be carefully, but not too tightly, sutured. Likewise, all cervical lacerations should be let alone, unless they penetrate so deeply as to involve the circular artery. This latter event has only occurred once in my experience, and in that case hemorrhage was furious but was quickly controlled by suture.

In these seven hundred cases, two mothers died, one of acute atrophy of the liver and the other of eclampsia. The latter patient, a negro, had been in coma for fourteen hours before any physician was called.

THE BABIES

Sex.—There were 344 boys and 348 girls in the 692 single labors. In the 16 children born twins—eight labors—there were 11 boys and 5 girls, making i. all 353 girls and 355 boys in the 700 labors.

In 480 cases there were 21 still-births, a little more than 4 per cent. All infants were considered still-born that died within forty-eight hours of delivery, unless some distinct cause, aside from congenital conditions, could be shown.

Among deformities noted were two of hydrocephalus, in one of which there were also a spina bifida, club-feet and penis adherent to scrotum; two infants had cleft palate, one had a thumb absent, one had twelve toes, two had hypospadias.

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AN INSTANCE OF UNUSUAL SENSITIVENESS TO RESORCIN

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In May, 1907, a patient consulted me on account of a severe dermatitis of the scalp and forehead, following the use of a dandruff cure. I ordered soothing applications under which the symptoms rapidly subsided. At the next visit, however, nine days afterward, I noticed that he had acne of the back of the neck, for which I prescribed a resorcin paste. I ordered this of moderate strength, 3.25 per cent., because the dermatitis had not yet entirely subsided. This application caused a violent reaction, and kept the patient awake all night. I then explained to him that the good effects of many medicines, among them resorcin, lay in their stimulating nature, and that with this preparation reduced one-half we would get its benefits without its

1. Am. Jour. Obst., 1907, lv, No. 2.

2. Virginia Med. Monthly, 1897.

3. New York Med. Jour., May 25, 1880, p. 572.

4. Am. Jour. Obst., May, 1905.