V.

Report on Physicians' Replies to Questionnaire Concerning Their Experience with the Vaginal Diaphragm and Jelly

Report on Physicians' Replies to Questionnaire Concerning Their Experience with the Vaginal Diaphragm and Jelly

Prepared by
The Research Department
of
HOLLAND-RANTOS CO., INC.
156 Fifth Avenue
New York City

For distribution to members of the Medical Profession only.

Introduction

A word of explanation concerning the reason for the questionnaire with which this report deals seems appropriate.

For the last four years the Holland-Rantos Company, dealers in obstetrical and gynecological materials, has been supplying the medical profession with certain contraceptives for the cure and prevention of disease. Its aim has been to manufacture and distribute only those products which are approved and endorsed by authoritative investigators. Holland-Rantos diaphragmatic pessaries are the result of years of experimental work by experts in Europe and the United States, and the formula of the vaginal jelly Koromex was worked out in the Clinical Research Department of the American Birth Control League. These products have been dispensed by the company to more than 12,000 physicians throughout the country, and the steadily increasing demand for them indicates their successful use.

Up to the present time, however, little specific information as to actual results achieved with various methods of contraception has been obtainable. What scant published material there is on the subject consists of the reports of clinics and of a few practitioners working independently here and there. These reports, as a rule, cover only selected cases in special categories. There are no reliable data on the results of contraceptive treatment secured *by physicians generally in their practice under ordinary conditions*—that is, information from physicians having for the most part no training in contraceptive technique.

To start a quest for such information, the company's research

department sent out a brief and simple inquiry, no attempt being made to secure other than a general expression from physicians as to the degree of success experienced with particular methods.

Replies have been received from nearly every state in the Union and from several outlying territories. Of the 2300 questionnaires sent out, 726 had been returned at the time of making the analysis —a proportion seldom equalled in questionnaires. As they were still coming in at the rate of six or eight a week it seems reasonable to say that a full third of the physicians approached will have replied by the time this report is published.

The significance of this response as attesting widespread interest in the inquiry is made clear when consideration is given to the natural reticence and cautiousness of the medical profession on the subject in question. The willingness of busy doctors to fill out and return such a questionnaire and to accompany it, as was done in the great majority of cases, with valuable additional remarks affords encouragement to the present investigators.

The Research Department desires to express its appreciation to the physicians whose co-operation made this report possible. It is with a sense of much satisfaction that the report is offered, and it is hoped that it will give interested physicians a good deal of practical information and additional confidence in their service to patients.

Accepted Methods

Before considering the actual report and the analysis of the replies received, it seems best to describe in some detail the particular methods of contraception with which the report deals.

The basic method is that of the occlusive type of pessary (diaphragm) combined with an impeding and spermaticidal jelly. A description of the various diaphragms appears at the end of the report. This method is relatively new in America, having been introduced less than five years ago. *It must not be confused with the cervical cap method,* a mistake commonly made. In the case of the cervical type of pessary the effort is made to cap the cervix tightly and thus prevent spermatozoa from entering the cervical canal.

With the vaginal diaphragm *there is no attempt to cap the cervix.* Extending from the upper posterior to the lower anterior portion of the vagina, it divides the vagina into two parts with the cervix in the upper part. A firm expansive pressure on the walls of the vagina exerted by the flexible coiled spring of the diaphragm effectually partitions off one part from the other and thus prevents the passage of spermatozoa into the os uteri.

To secure the proper degree of pressure, a larger circumference is required than is necessary merely to cap the cervix. *The largest diaphragm consistent with comfort should always be fitted.* The sizes generally indicated range from 65 to 80 millimeters. If a size larger than an 85 is required, the patient's condition probably is abnormal, calling for special treatment by the physician.

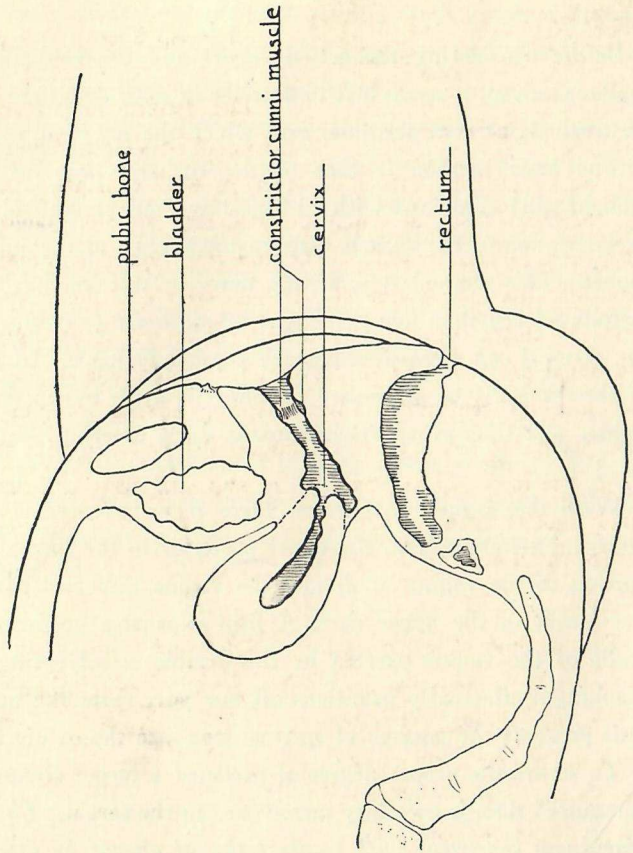


FIGURE 1.
Diagram of the Genito-Urinary Tract. Vertical Cross Section—Gynecological Position.

Figure 2 shows the diaphragm alone, and Figure 3 shows it in place. The patient is resting in the gynecological position. Note that posteriorily the diaphragm fits well up behind the cervix and that anteriorily it fits just behind the pubic bone and the constrictor cunni muscle.

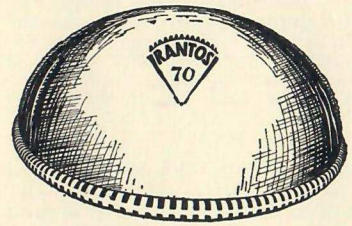


FIGURE 2.

Dome Up Preferred

The diaphragm is made hemispherical in shape (Figure 2) to provide redundant rubber so that it will conform easily and naturally to the parts. Some practitioners put the diaphragm in with the convex side down. The majority, however, prefer to put it in with the convex side up. In the latter case the rubber dome comes in closer contact with the cervix and thus may give some additional protection. This position facilitates removal since, with the dome up, the rubber covered spring around the rim may be easily caught with the tip of the finger. When put in with the dome down, the loose rubber may roll or slip and make the rim of the diaphragm much more difficult to catch hold of for removal.

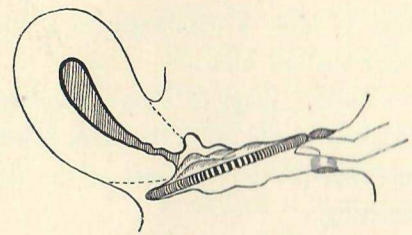


FIGURE 3.

The method of applying the diaphragm may be described as follows. If it is to be applied with the dome side down, put some Koromex around the rim (Figure 4). This gives the added protection of the spermaticidal jelly, while at the same time providing a lubricant. Then squeeze together opposite sides of the circular spring forming the rim of the

diaphragm (Figure 5) and insert into the vagina one end of the loop thus formed.

If the dome-up position is desired, simply reverse the diaphragm when compressing the two sides of the rim together. In this case Koromex is applied by indenting the dome (Figure 6). As the sides are squeezed together the dome is caught from below and pulled part way through to form a pocket for the jelly. It is advisable that jelly should be placed not only on top of the dome but also around the edges. Then insert one end of the loop into the introitus as before.

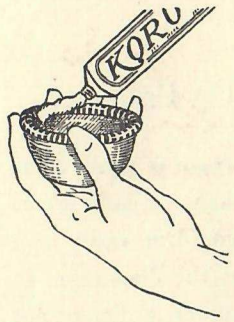


FIGURE 4.

Emphasis must be placed upon the necessity of inserting the loop end of the diaphragm in such a way that it bears upon the posterior wall of the vagina (Figure 7), so that, as it is pushed in, it will be sure to slip *underneath* the cervix and thus fit firmly into the posterior cul-de-sac.

When it has been inserted as far as it can comfortably go, its last entering portion should slip up behind the pubic bone and the constrictor cunni muscle. From this it will be seen that a narrow but deep vagina may take as large a diaphragm as a wide but more shallow one.

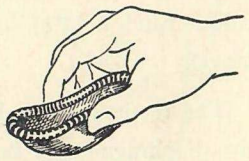


FIGURE 5.

Figure 3, page 3, shows the diaphragm properly placed, with the index finger pushing into position the end of the loop last entering.

How To Determine the Proper Size

It should be noticed that in the normal vagina the distance from the bottom of the posterior cul-de-sac to a point behind the pubic bone and the constrictor cunni muscle is greater than the distance

from the bottom of the anterior cul-de-sac to the same point. It is only in some abnormal cases, marked retroversion or the like, that this is not true. It follows, therefore, that in the large majority of cases in which the proper-sized diaphragm is chosen by the physician, *if it goes fully into the vagina, it must be in proper position.* Additional assurance may be obtained by instructing the patient to feel the cervix through the diaphragm. Once in place, the diaphragm remains secure.

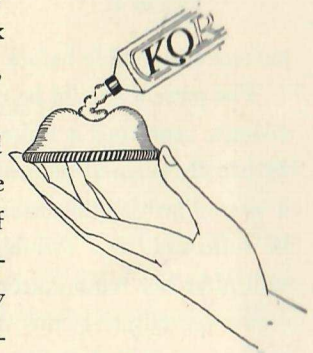


FIGURE 6.

Contrast the ease, simplicity and sureness of the technique of fitting the diaphragm with the difficult process of fitting the cervical type of pessary (Figure 8). One can see at a glance how hard it is for the patient to put the cervical type in position. Any practitioner who has ever attempted to fit a cervical cap will have the greatest sympathy for the patient who is faced with the problem of applying it herself, especially if she has short fingers or is obese. An additional objection is that the cervical cap may become dislodged. In many cases the posterior cul-de-sac is large enough to hold a cap type of pessary when it is entirely out of position, and this very circumstance may give rise to a feeling of security which is absolutely false.

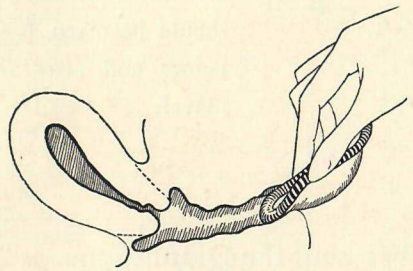


FIGURE 7.

To remove the diaphragm catch with the finger the part of the rim nearest the vaginal entrance (Figure 9) and gently *pull down* and *outward.*

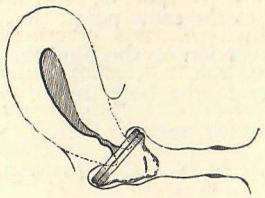


FIGURE 8.

It is important that both the bladder and the lower bowel be empty at the time of fitting the diaphragm. An English clinic official reports that more failures are due to constipation than to any other cause. In cases of extreme constipation the physician will do well to correct the trouble before attempting to make a fitting.

The patient should be cautioned that her vaginal condition may change, requiring a refitting by her physician at least once a year. She should certainly be informed that childbirth will alter her requirements.

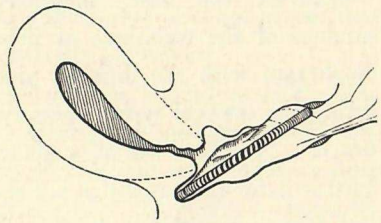


FIGURE 9.

To be effective the diaphragm must be left in position for *several hours after use,* commonly over night, but *not more than twelve or fourteen hours.* When removing the diaphragm a copious cleansing douche of warm water (with pure soap if desired) should be taken, both before and after removal.

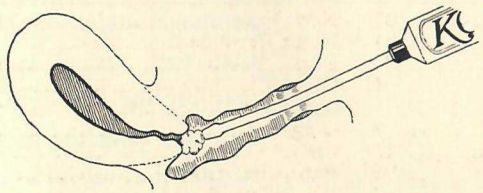


FIGURE 10.

Use of Koromex Without the Diaphragm

Koromex is frequently used alone. A surprisingly large number of physicians replying to the questionnaire reported satisfactory results with this method. Figure 10 shows how the patient, when properly instructed, may apply Koromex directly to the cervix, thus getting the benefit of mechanical block as well as that

of chemical action. The reports would seem to indicate that this method gives satisfactory results in nulliparous cases where the cervix has not been dilated. Its use alone, however, must be left to the judgment of the physician. *The safe rule to follow is to use both Koromex and diaphragm.*

With this brief description of methods the questionnaire will now be considered.

A Statistical Analysis

Twenty-three hundred copies of the questionnaire were sent out to practitioners all over this country and in Canada, the Philippines and Alaska. Replies were received from each of the three last mentioned and from all but three of the 48 states as the following table indicates. The figures indicate the number of replies.

Geographical Origin of 726 Replies by Physicians to our Questionnaire

Alabama	6	Nevada	1
Alaska	1	New Hampshire	4
Arizona	7	New Jersey	30
Arkansas	10	New Mexico	10
California	47	New York	154
Colorado	11	North Carolina	9
Connecticut	16	North Dakota	10
Delaware	0	Ohio	36
District of Columbia	4	Oklahoma	11
Florida	8	Oregon	11
Georgia	12	Pennsylvania	42
Idaho	6	Philippine Islands	2
Illinois	23	Rhode Island	4
Indiana	6	South Carolina	0
Iowa	16	South Dakota	3
Kansas	7	Tennessee	6
Kentucky	7	Texas	14
Louisiana	4	Utah	0
Maine	1	Vermont	4
Maryland	4	Virginia	13
Massachusetts	22	Washington	32
Michigan	21	West Virginia	5
Minnesota	31	Wisconsin	18
Mississippi	5	Wyoming	3
Missouri	9	Foreign	3
Montana	4	Unknown	1
Nebraska	12	Total	726

Question 1

The first question with a tabulation of the replies follows:

Have your patients been satisfied with the use of the diaphragm with Koromex?

Those answering with a definite "yes"	410	
"Yes" qualified by "generally so" or "a few complaints" or "a few failures"	76	
Total reporting favorably		486
Those who indicated no answer	45	
Those who replied "not sufficient data for report"	72	
Those who replied "not used"	65	
Total giving no data		182
Those reporting favorably, but qualified by "many failures," "few seem to like it"	4	
Those reporting "unfavorable"	54	
Total reporting unfavorably		58
Total returning questionnaire		726

Of the 544 reporting either for or against the method, 486, or just less than 90 percent, may be said to have reported favorably, while only slightly more than 10 percent reported unfavorably. Considering the fact that this is the report of several hundred general practitioners all over the country fitting an instrument new to them, it is truly significant. Most of these physicians have had no special instruction, and have had to depend upon written directions and their own ingenuity and skill to achieve satisfactory results.

Question 2

How long have you been using the above method?

Of the total number of questionnaires, 87 gave no answer to this

question, and 65 specified "not used" or "not recommended." This total of 152 must be excepted. Of the remainder (574):

126 reported use of method for less than a year
121 reported use for one year
199 for two years
86 for three years
31 for four years
11 for five years or "several"

No especial significance can be attached to this table other than its bearing on the amount of experience the reporting physicians drew upon in estimating the reliability of diaphragms when used in conjunction with Koromex. An interesting relationship may be shown, however, by calculating the percentages of the numbers reporting as favorable and as unfavorable for each period of time (Table 3, page 11). The number reporting favorably is almost constant at about 90 percent, regardless of the length of time the method had been used. This might be interpreted to indicate as the cause of the ten percent of failure not the method itself but the human element.

Question 3

The third question was:

Has the use of Koromex alone been satisfactory?

Those reporting it as unqualifiedly satisfactory	156	
Satisfactory, but with qualifications	56	
Total reporting it satisfactory		212
Not used or tried	272	
Not enough data to draw conclusions	77	
No answer	60	
Total not reporting		409
Unsatisfactory	102	
Generally unsatisfactory	3	
Total reporting it unsatisfactory		105
TOTAL		726

From these figures it is seen that 105 reported it as unsatisfactory, but 212 reported it as satisfactory. *Thus* 66.8 *percent, or slightly more than two-thirds of all those reporting on this method, found it satisfactory.* Many made note of the fact already mentioned that with this method results are more likely to be satisfactory in nulliparous cases.

Of those reporting on the use of Koromex alone only 23 could be definitely determined as fixing the length of time of such use. Of this number five reported use for less than one year, five for one year, eight for two years, and five for three years.

Question 4

The fourth and last question was:

Would you be interested in having a report of this investigation?

Six hundred and ninety, or 95 percent, replied in the affirmative, many of them emphatically so, with such remarks as "Very much interested" or "Yes, indeed." Thirty-one failed to answer the question. Five said definitely "No."

Conclusions

From the data as given each must draw his own conclusions. It is permissible to say, however, that where Koromex is used alone it gives satisfactory results in specially indicated cases. *The combined method—the diaphragm with Koromex—gives satisfactory results in* 90 *percent of all cases, even in the experience of the general practitioner.* In the hands of specialists in contraceptive practice, the *percentage of success is as high as* 97 *or* 98, according to their reports.

TABLE 1.

Satisfaction with Koromex and Holland-Rantos vaginal diaphragms.

	Number	Percent.
Total	544	100.0
Satisfactory	486	89.5
Unsatisfactory	58	10.5

TABLE 2.

Length of Time (by years) 574 reporting physicians in private practice have been using Holland-Rantos Vaginal Diaphragms with Koromex.

Number of Years	less than 1	1	2	3	4	5
Number of Physicians	126	121	199	86	31	11

TABLE 3.

Periods of experience of those reporting, showing percentages favorable and unfavorable for each period.

	Less Than a Year		One Year		Two Years		Three Years		Four Years		Five Years	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Those reporting "Yes" and "Yes" qualified	95	90.5	94	90.4	175	88.5	67	88.2	26	92.9	12	92.3
Those reporting "No" and "No" qualified	10	9.5	10	9.6	23	11.5	9	11.8	2	7.1	1	7.7
TOTAL	105		104		198		76		28		13	

A Physician's Report on 100 Cases

One of the physicians answering the questions in letter form, supplied much significant material. This practitioner's thoroughness in follow-up and his scientific procedure in general renders this letter worth quoting:

> I have recently been over my records. I have made notes of about one hundred cases with whom I have talked about contraception. Ninety of these patients were advised to use the vaginal occlusive pessary with jelly. Of twenty-five of these I have no follow-up information. Twenty have been seen less than six months ago. Of forty-five I have follow-up information of value. Of these forty-five, twenty have successfully used the method from six to twelve months. Twenty-three have used it a year or more. Two have conceived. I have not, however, the assurance that they both took no chance without protection. I have eight patients who have promptly conceived when they *tried* to, after successfully using the prevention for a time.
>
> I am in no sense a specialist; this is the record of a "family doctor." Most of my patients were from my own family practice, though my unusual interest in this has brought me a few people from a distance. These records go back for four years, though most of the work was done in 1927 and 1928.

In granting permission to the Research Department to quote his report, this physician wrote:

> I should suppose one of the significant things about it is that it is largely the work of a family doctor in his own practice. Of the two failures quoted in that letter, one should be crossed off. I have had a talk with the patient and found that she had taken many chances without protection. The other patient who failed I have not talked with, and do not know in what classification she belongs.

Comments on Some Doctors' Observations

The cooperating physicians offered so many pertinent observations on the various phases of the problem that it seems worth while to report and comment on some of them.

"This is the best method I know of." Many of the physicians reporting made this or a like remark. There can be little doubt of the truth of this statement, as it is generally conceded that the method in question (diaphragm combined with jelly) has most of the advantages and fewest of the disadvantages of all contraceptives. It has been found most reliable and economical in 25,000 to 30,000 cases in European experience. American clinical experience has been similar.

"Will not remain in proper position." This would indicate some abnormal structure of the vagina, possibly due to an injury at child birth, or to the fitting of too small a diaphragm. When properly fitted, so that it reaches to the bottom of the posterior cul-de-sac and then lodges snugly behind the pubic bone and the constrictor cunni muscle, it will be impossible for the diaphragm to get out of place.

"Too much trouble." This can only be due to faulty comprehension of the method. So far as preparation for its use is concerned the method recommended requires less time and trouble than any other. It is a matter of developing the proper technique.

"Douche should not be taken for eight hours." This observation occurred frequently. It is a serious mistake to believe that it is better to take a douche at once. Approximately eight hours should elapse. During this time the Koromex will have ample opportunity to destroy all spermatozoa. The douche should consist of plain or soapy water, as warm as it can be borne comfortably. *Strong germicidal solutions should be avoided.* These destroy the normal flora of the vagina (Doederlein's bacilli), thereby rendering the wife susceptible to impregnation when on health grounds it is

contraindicated. Apart from this consideration, statistics gathered abroad show their reliability rate to be low.

"Majority gradually dispense with the diaphragm and use Koromex alone." This, or a statement similar in substance, was repeated a number of times. Several asked for a report on the efficacy of Koromex when used alone. The evidence on Koromex used alone already has been given. Where another pregnancy would not be disastrous it may serve satisfactorily. Where, however, *absolute security is indicated as essential for the preservation of health,* as, for instance, to give the complete freedom from worry so necessary in the treatment of some neurotic conditions, the *use of the combined method* must be strongly recommended.

"Better in nulliparæ—not so good in multiparæ." "Before first pregnancy." "Yes, where there is not too much relaxation." These and similar remarks were made regarding the use of Koromex alone, the efficacy of which has already been discussed. In some cases of obesity, for instance, where it is impossible to use a diaphragm, Koromex is reported as giving highly satisfactory results.

"Does the continued use of Koromex," one physician asked, "have harmful effects upon tissues or organs?" On the contrary it frequently has a tonic effect. It is so mild that it gives no bad results if continued indefinitely. This is one of the great advantages of the method.

In this connection it is interesting to refer to the letter on page 12 of this booklet, which indicates that eight patients conceived immediately when they wished to; and to give the statement of another physician who said that two married women who used Koromex without the diaphragm for a year decided, after being restored to health, that they wanted to become pregnant. "One," the physician goes on to say, "never menstruated after stopping the use of Koromex, and the other had but one period."

The Therapeutic Value of Koromex

Apart from its efficiency as a contraceptive jelly, Koromex is recognized as having pronounced therapeutic value in the treatment of various female disorders, especially those caused by gonorrhea. A number of physicians who have experimented extensively with Koromex warmly recommend the intra-vaginal use of this lactic acid jelly.

Identification of lacto-bacillus acidophilus with Doederlein's bacillus was first reported by Stanley Thomas, of the department of biology, Lehigh University, in the Journal of Infectious Diseases (43:218, Sept. 1928). The bacillus, he found, "is not present in the vagina in cases of gonococcal vaginitis. The organism has an inhibiting effect on the growth of the gonococcus in vitro, and lacto-bacillus acidophilus vaginal implantation may present a rational cure for gonococcal vulvo-vaginitis and other gonococcal infections." Reviewing Thomas's article, a writer in the Canadian Medical Association Journal (Vol. XX, No. 1, pp 90-91) says: "The important thing is the practical application of the author's observations. Two children, aged eight and three years respectively, suffering from gonococcal-vulvo-vaginitis, were treated with douches containing cultures of lacto-bacillus acidolphilus. In the first case the gonococci disappeared after two days and the pus cells after four days. The vaginal secretion remained alkaline (p^H7.3) for two weeks. After three weeks of the specific treatment, the secretion had a reaction of p^H6.6. The child remained under observation for a year; during this period gonococci were never found in the discharge, though searched for patiently, and the clinical signs of vulvo-vaginitis never returned. In the second case gonococci disappeared in two days and the pus cells after five days."

The clinic of a large institution for delinquent girls in an east-

ern state has secured excellent results from the use of Koromex in cases of gonorrheal infection. A physician in the Middle West, reporting his experience with Koromex in treating cervical erosions and endocervicitis, praises the jelly highly. He writes:

> We have used a great deal of Koromex and find it dependable not only as a spermaticide but also very valuable as a treatment of cervical erosions and endocervicitis, whether due to a mixed infection or acute gonorrhea. Our belief coincides with that of Professor Werner at Kermaner Clinic, Vienna, who teaches that the Doederlein bacillus, which normally is present in the cervix, produces its own lactic acid, thereby inhibiting the growth of the germs in the cervix. In endocervicitis and in acute gonorrhea there are, no doubt, not enough of the Doederlein bacilli present to inhibit the growth of the harmful bacteria. In Koromex we are simply adding lactic acid put up in a refined jelly.
>
> In treating the so-called cervical erosions we have had very good results. We instruct patients with large erosions to insert the Koromex once a night, and in three weeks' time erosions that have been chronic for years are either cleared up or almost cleared up. In acute gonorrhea our experience with Koromex has been pleasing. The discharge rapidly subsides, which immediately helps the mental state of the patient by showing that the growth of bacteria is being inhibited. We believe that this lactic acid jelly prevents many cervical erosions in acute gonorrhea if used early, and will clear cervical erosions after they have developed.

Methods To Be Avoided

As has been stated, patients should be warned against the use of douches or suppositories or vaginal jellies of such germicidal strength as to destroy the normal protective flora.

Other methods that have proved injurious to patients and should therefore be avoided are intra-cervical and intra-uterine pessaries. These stem pessaries, known as the "collar-button," the "wishbone," and so on, often lead to serious infections. There is an extensive medical literature condemning their use. Moreover, experience indicates they are not to be relied upon to prevent pregnancy.

Perhaps the most widely used of all methods are the condom and the douche. But neither is a reliable contraceptive. Condoms break. Douching can affect only spermatozoa left in the vagina; it cannot reach spermatozoa that have entered the uterus.

In his paper, "The Comparative Value of Current Contraceptive Methods," Dr. Norman Haire of London gives a table showing the percentage of failures that he has found with different methods, as shown by a study of a large number of cases. According to his figures, the percentage of failure of the douche was 73.5 and of the condom 51.4. Cervical cap pessaries showed a failure of 87.5 percent. That of quinine suppositories was 70.8.

Tests To Be Applied

It might be well to consider the essential features of a good contraceptive. Granted that none is as yet perfect, what should be looked for?

First and foremost, *reliability*. Not only from this report, which indicates a high degree of reliability in the hands of average patients the country over, but in clinics here and abroad, the weight of authority unquestionably favors the diaphragm as the most satisfactory for the majority of cases.

Second, it must be *physiologically permissible*. It must not injure the patient physically or psychically. Many of the commonest methods, notably withdrawal, and the use of the douche, are open to serious objections for reasons which may be classed under one or both of these heads.

Third, it must be *psychically satisfactory*. The occlusive diaphragm is most successful from this point of view. Granted that any method which seems to require forethought is open to objection, this method is open to the least objection. Whatever inter-

ference there may seem to be may be offset by cultivating, in the patient, the right attitude of mind.

Fourth, it must *not require elaborate preparation* beforehand. This method requires the least preparation commensurate with complete protection. Haire, the great European specialist, recommends that the diaphragm be inserted each night so that it may become an accustomed, unconscious part of the daily toilet. He finds that this practice, after a while, removes the æsthetic objections of some ultra-sensitive women.

Fifth, it must be *simple in operation.* This method is the simplest yet devised giving adequate protection. At the same time it is *not injurious to health.* No one has yet been able to bring forward the slightest fragment of clinical evidence that the vaginal diaphragm, properly fitted by a physician, properly used and cared for, has ever injured any woman in any respect whatever.

Types of Occlusive Diaphragms

The occlusive diaphragm was developed about fifty years ago by Dr. Mensinga, who for a number of years was professor of anatomy at the University of Breslau, Germany. Although in common use in Holland for decades, it was little known in this country until about five years ago, and has been available to American physicians for only a little over four years.

The **Mensinga type** is a thin rubber hemisphere built upon a rim consisting of coils of thin, flat watchspring. Somewhat stiffer than the diaphragm with the coiled spiral spring, it is harder to remove. The flat spring is also more easily distorted than the spiral spring. In some special cases, however, it has one distinct advantage, that where the cervix is long and flat the stiffer spring of the Mensinga type will be more sure of insertion underneath it. Being stiffer, it *conforms less readily to the shape of the vagina,* and seems in general to be less satisfactory than the spiral spring type.

The **Matrisalus type** is an occlusive diaphragm of a special shape (Figure 11). In cases of prolapse or cystocele, the front

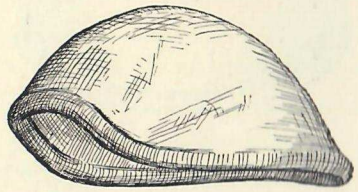
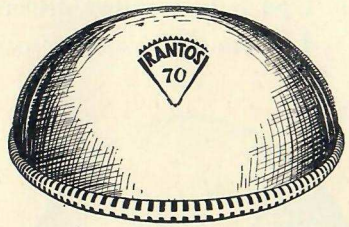


FIGURE 11.

part of the Matrisalus with its offset rim fits up farther behind the pubic bone and the constrictor cunni muscle, thus raising the cystocele and holding the uterus in position. *It is indicated in special cases only.*

The **Rantos type** is an occlusive diaphragm with the spiral spring in the rim. It is unexcelled for general use. Combining flexibility with sufficient resistance to assure a snug fit, it is less likely to bend out of shape. At the same time, because of greater flexibility, it tends to conform readily to the shape of the vagina, rather than requiring the vagina to conform to the shape of the diaphragm.

It should be borne in mind that it is not easy to manufacture any of the types of diaphragms just described. Cervical caps, like condoms, are turned out in large quantities by machines. *But the vaginal diaphragm is strictly a hand-made article* that requires an unusual degree of skill to fabricate. Great care also must be taken in vulcanizing the plastic rubber after it is joined to the spring. Unless the rubber is properly cured it will deteriorate rapidly. A method has now been perfected of using genuine Para rubber in the Rantos type. This makes for greater durability.



Rantos Type of Vaginal Diaphragm.

Medical Indications

[Quoted from an article by Norman E. and Vera C. Himes on "Birth Control for the British Working Classes: A Study of the First Thousand Cases to Visit an English Birth Control Clinic," *Hospital Social Service Magazine*, June, 1929. This special note on medical indications was especially prepared for the article mentioned by the Committee on Maternal Health (Academy of Medicine Building, New York), and is probably the most complete and accurate summary of indications in medical literature.]

In the United States most clinics giving contraceptive advice are limited by law to accepting cases with medical conditions or histories which would make pregnancy inadvisable for health reasons. In a few states such advice may be given, in the absence of special restrictive legislation, for social and economic reasons. No authoritative formulation has been made of the principles upon which contraceptive therapy should be based, though attempts have been made to establish these for therapeutic abortion. The Committee on Maternal Health (2 East 103rd Street, N. Y. C.) is compiling material on this subject from medical literature and also by the study of case records. In New York clinics the decision rests upon the result of individual examinations, both as to the medical need "to cure or prevent disease" and the type of treatment advisable.

From records of some seven hundred cases the medical indications recognized *in practice* fall into two general kinds so far as the mother is concerned: (a) pathological conditions, either of active disease or functional and structural disturbances and weaknesses which might render pregnancy and delivery extra hazards, and (b) non-pathological considerations, having to do with optimum conditions for pregnancy and delivery, including the spacing of offspring and the best seasons. In addition there are eugenic considerations having to do with the quality and health of the children. Among specific conditions listed, five groups bulk large: (1) *Gynecological* and *Obstetrical*, including recent delivery or abortion, deformed pelves, and recent plastic operations; histories

of repeated dangerous pregnancies, or deliveries with such symptoms as toxemia, pernicious vomiting, convulsions, too frequent, prolonged, or instrumental labors, and cæsarian sections. (2) *Cardiac* disorders especially with decompensation. (3) *Tuberculosis,* laryngeal, pulmonary or osseous, if active, and sometimes if arrested. (4) *Nephritis and hypertension,* especially where there is a history of toxemia with earlier pregnancies. (5) *Mental and Nervous,* especially insanity, feeblemindedness, and epilepsy, and certain other nervous disorders. Besides these five great groups occasional entries appear of anemia, toxic goitre, extreme malnutrition, extreme obesity, diabetes, arthritis, syphillis, and gonorrhea.

Women with some of these conditions should be sterilized rather than left to depend upon contraceptive measures. Conditions of a clearly incurable kind, especially those inevitably calling for interruption of pregnancy if it occurs, should be indications for sterilization rather than temporary measures. Some hospitals are developing a policy of sterilization whenever interruption is resorted to for non-accidental or incurable conditions.

Eugenic considerations include history of sufficient degree of insanity or feeblemindedness or epilepsy in the immediate family, especially where defective children have already been born. Here again sterilization of the mother or father is indicated. Tuberculosis in the immediate family and active syphillis or gonorrhea of the father are other eugenic considerations however not calling sterilization into the question. Contraception has not been systematically applied to other large groups in the community who for their own sake or that of their possible offspring might be asked not to reproduce such as carriers of strains of mental disability, haemophilia, the deaf, especially deaf mutes, a considerable proportion of whose conditions are increasingly recognized as hereditary, the blind or those otherwise hopelessly crippled, who are so handicapped as to be unable to support children, and possibly, those with family histories of cancer.

Medical Opinion

William Allen Pusey, M.D.
Former President of the American Medical Association

The first prerequisite to satisfactory study of any subject is free access to knowledge of it, and that necessitates the unrestricted interchange of experience and information among scientific men. That is not allowed now upon the subject of methods of birth control. We are not even in a position where we can freely determine the merits and demerits of the subject. It is not that methods of birth control are not discussed and practised; they are everywhere. But the facts—and the fiction—are passed from individual to individual—ignorantly, crudely, unsatisfactorily and in ways that often are vicious. It is only scientific, decent discussion of the subject that is prevented, the sort of discussion that is necessary and can only be had, when it is untrammeled, among self-respecting men, who can bring to its consideration knowledge and wisdom. This situation is medieval. From the history of similar situations in the past it cannot be doubted that it must in time give way. To see that this is brought about as quickly as possible is a thing worthy of the vigorous efforts in that direction that are now being made.

Robert L. Dickinson, M. D.
A Leading American Gynecologist
Secretary of the Committee on Maternal Health

A woman must be pretty sick to get (contraceptive) advice from many men in private practice, and still more in hospitals. The justified need is widespread. It involves *every* mother after delivery, who should be instructed in measures to take to avoid pregnancy until she is fit to bear another child, it includes every convalescent from operation or real illness and every woman worn down by imperative overwork. And the doctor who does not help

to prevent the start of a pregnancy that he is persuaded will run his patient down further, how does he excuse himself of neglect of ordinary health protection? . . . That many women apply for information in order to shirk motherhood can hardly be claimed, if among several thousand applicants at birth control clinics the average number of pregnancies is four, of living children three, and if nearly a quarter have five or more living children.

From the information in possession of the Committee on Maternal Health, which has studied these matters five years, these figures appear to picture the situation in America and England, in Germany and Russia.

The doctor asks nothing but freedom—clearly worded freedom —to do for his patients what he wants done for his own wife and daughters.

Hannah M. Stone, M.D.
Clinical Director of the Birth Control Clinical Research Bureau of New York

An improvement upon the use of the vaginal pessary is a combination of the pessary with a contraceptive jelly. . . . The above method, that is, the use of the vaginal occlusive pessary, with or without a contraceptive jelly, comes nearest to the requirements of a satisfactory anticonceptional measure. Physiologically, the method is apparently sound. It permits coitus to take place in a natural manner, and, so far as I have been able to observe, there result no ill effects from its use. It remains in the vagina but a short time, and is unlikely to cause any irritation to the tissues. Psychologically, too, this method is more adequate than any other in use. . . .

Is it reliable? The answer to this question is, of course, of prime importance. No absolute figures can be given as yet. Statistical studies in this respect are at present being carried on, and will

be published when completed. The reports published by other investigators, which coincide with my own observations, give an incidence of failure of two or three percent. This is probably as good a record as can be obtained with any contraceptive which depends upon the individual equation of the patient in its application.

Adolf Meyer, M.D.
The Johns Hopkins Hospital

Social happiness, the health of the individual and the health and development of the progeny—it is these three points which furnish the basis for any consideration of sex and of birth control.

To approach this goal, we really ask for little: Merely for the right of the physician to be allowed to give his advice and guidance where his judgment calls for a sensible regulation of the chances of pregnancy. There is no intention to favor wantonness and frivolous dodging of conjugal and parental duty. We do not advise or legislate dogmatically about the ultimate size of the individual family. We only want a clear recognition of the right to offer and use the best professional and responsible advice in the protection of the wholesomeness of marital relations, of the health of potential mothers, of the hygiene of the pregnancies that occur and of the hygiene of the children born. . . . Like the prevention of venereal disease, the prevention of unwelcome and especially potentially harmful and dangerous pregnancies certainly is a serious and highly responsible medical and individual consideration. . . .

We also urge that physicians discuss conscientiously ways of controlling and of discussing the actual results and effects of their advice, so that a body of facts and frank comparisons of experience can become a guide for practice and progress—not an arbitrary blundering along, but a readiness to correct mistakes and to work for ever wiser foresight.

Norman Haire, Ch.M., M.B.

London Specialist in Contraception

The opponents of Birth Control make a curious demand for *perfection* in the matter of contraceptives. They will apparently be satisfied with nothing less than an absolute fool-proof method, which can be used by a person without any intelligence and yet yield 100 percent of success. It must not entail a visit to a doctor; the woman must be able to choose it herself without any special fitting; it must require no expense, no manipulation, no need for cleanliness, no care or trouble of any sort. It must under no conceivable circumstances be able to cause any harm. . . . But I do want to say that there is one method against which no charge of harmfulness can be brought, and which has stood the test of forty-five years' use. This is the method recommended by Dr. Aletta Jacobs, the oldest living expert on contraception, who began to use it over forty years ago. . . .

Any medical practitioner should be able to master the method with ease, and, as I have said, hundreds of practitioners in this country (England) are using it with good results. Naturally the more the doctor becomes accustomed to its use the more expert he becomes.

(Note: The method referred to is the use of the Mensinga type of diaphragm.)

J. Rutgers, M.D.

Dutch Physician

To prevent involuntary abortion is one of the teachings of sexual hygiene. The two chief indications are syphillis, and too frequently occurring pregnancies. That both these can be most favorably modified by birth control is obvious.

In those cases . . . in which the surgeon, in virtue of his office is bound to remove the foetus "lege artis" (according to the rules of his profession) when life is threatened by serious danger, in all

such cases it must be considered as irresponsible, lacking in common sense and mischievous, if the doctor . . . has simply warned his patient against pregnancy without informing her of the means of prevention which may safely be used by married people.

For this purpose, however, it is most necessary that the doctor himself shall be thoroughly familiar with the technic of these methods, even in difficult cases, and that he is thoroughly capable of judging of the relative degree of safety of the various methods or combinations of methods in comparison with the uncertainty of the promised abstinence on the husband's part.

Charles E. Goddard, M.D.

English Physician and Surgeon

Whatever we may think of Birth Control, it is not difficult to the medical mind to enumerate conditions that demand this help, for they are to be found in the experience of all medical men, whether in consulting work, in hospital life, or in private practice.

C. Killick Millard, M.D.

English Physician and Surgeon

I may say that I have recently issued a questionnaire to a number of leading gynecologists in this country (England), medical men and women of eminence, to find out the opinion of the profession on this question. I did not expect to get very definite light, because I know how this question has been neglected. . . . Out of sixty-five replies I have received to date an analysis comes out as follows. I asked whether they approved of the use of contraceptives, and a very large majority answered "Yes"; some said "Emphatically." . . . A very large majority—three to one—was in favor of these methods. That is to say, the majority of leading doctors in this country, specially qualified to answer this question, are in favor of the use of contraceptives.