# PRIMARY DYSMENORRHEA*

## A LOCAL MANIFESTATION OF A CONSTITUTIONAL DISEASE AND ITS TREATMENT

By MARIAN GOLDWASSER, M.D.
*Los Angeles*

DISCUSSION *by C. Morley Sellery, M. D., Beverly Hills; Etta Gray, M. D., Los Angeles; N. Kavinoky, M. D., Los Angeles.*

THE unsolved problem of primary dysmenorrhea is faced today not only by the gynecologist and the general practitioner to whom the numerous sufferers apply for help, but also by the school physician, who has under supervision several thousand adolescent girls from year to year. The victims of dysmenorrhea usually feel too ill to attend school, and remain in bed for one or more days every month. Those of the girls who attempt to come to school when suffering pain are too ill to attend their classes, and spend most of the day in the nurse's room.

To the school physician these girls present not only a health problem, but also an attendance problem, for their frequent absence from school causes a considerable and unnecessary financial loss to the school system—the local school board receives its allotment from the State on the basis of attendance.

Dysmenorrhea among adolescent girls occurs rather frequently. Dr. Mary Hodge made a study of 914 healthy girls in the gymnasium classes in the Public Athletic League in Baltimore, and found that 6.3 per cent required rest in bed for one day or more. In 1927, a similar study was made by Professor Miller of the College of Medicine of the University of Iowa. He found that, among 785 young college women and nurses, 17 per cent had pain sufficiently severe to require rest in bed or limited activity. Professor Miller concludes his study with the statement that the fact cannot be evaded that dysmenorrhea remains today an important economic factor.[1]

### LOS ANGELES HIGH SCHOOL STUDENTS

In 1933, I made a study of 1,606 girls who had reached maturity and who were attending high school in four different localities around Los Angeles. I found that 169 of these girls, *i. e.,* 10.5 per cent, suffered from a more or less severe form of dysmenorrhea which necessitated either their absence from school or their lying down in the rest rooms for several hours during the first and sometimes the second day of the menstrual period.

The great majority of girls do not have any pelvic pathology and suffer from the primary type of dysmenorrhea, the cause of which is almost as much of a riddle today as it was thirty years ago.

### GENERAL SYMPTOMS

In observing the girls who most frequently complain of dysmenorrhea, I have noticed that the majority of them suffer also from malnutrition in one form or another; that they are usually thin, anemic, and fatigued, and suffer from visceroptosis and constipation; and that many have poor posture and poor circulation, and frequently are subject to a focal infection brought about by decayed teeth, diseased tonsils, or chronic appendicitis. Many girls are emotionally unstable and restless. A smaller number are overweight, pale, and apathetic. Many have little supervision at home, keep late hours, and do not have the proper food. They take for granted the fact that they must be subject to pain and discomfort for several days every month, since their mothers and older sisters had to face the same condition in their girlhood. They expect to suffer pain at every monthly period, go to bed when it appears, and sometimes take a home remedy to relieve it, but do not suspect that their suffering is avoidable.

In evaluating all these factors in the physical and mental make-up of the girls, I began to wonder whether or not their constitutional inferiority and morbid attitude toward menstruation are only accidental, or unrelated in many instances to the occurrences of dysmenorrhea, as cause and effect; or perhaps all three are only symptoms caused by an unknown etiological factor, of which the medical profession is still in search. In order to clarify to some extent this relationship, I thought it might be worth while to make a study of a certain number of cases and see how the menstrual condition would be affected by improvement in the physical and mental status of these girls.

### RECENT LITERATURE

A review of the recent literature on the subject reveals that most of the authors, after first making the statement that dysmenorrhea is only a symptom of a pathological condition, the etiology of which is so far not known in every case, present their theories and a corresponding form of treatment which proved successful in a larger or smaller number of their cases.

There is one statement, however, which can be found in practically all the latest works on dysmenorrhea, whether gland therapy,[2] insulin,[3] calcium,[4] carbohydrates,[5] control of allergy,[6] or surgery,[7] is suggested as relief, this statement is that the general health of the patient and her mental attitude should be considered as paramount in outlining the treatment.[8]

"I have always felt," says J. Novak, "that in many instances the mothers of the dysmenorrheic young girls were in greater need of sex instruction than the patients themselves; far too often the girl at puberty is coddled into the belief that the menstrual period is a time of severe invalidism." And he further adds that psychotherapy relieves a large number of patients suffering from primary dysmenorrhea.[9] Emil Novak states that "in women who are constitutionally deficient, as in the case of thin, anemic and asthenic girls, primary dysmenorrhea is very common. . . . I have repeatedly seen cases of severe dysmenorrhea improved or cured without any local treatment whatever, simply by improving the patient's general condition through measures of general hygiene."[10]

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* From the Health Section of the Los Angeles Board of Education. A preliminary report of 286 cases.

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Alexander Altshul suggests the treatment of dysmenorrhea with insulin, and states that, after the war, the populations of Germany and Austria suffered from lack of food, especially vitamins and mineral-bearing elements, with resultant malnutrition and concomitant endocrinopathies. The women in these countries suffered from severe dysmenorrhea, as well as from amenorrhea. The use of insulin improved the nutrition and relieved the menstrual pain on a constitutional basis.[8]

### AUTHOR'S CONCLUSIONS

The suggestions of the above-mentioned authors and others, and my own observations during the nine years in which I have served as school physician, coupled with my experience in private practice, have made me feel that the treatment of the physical defects, and of the faulty mental attitude, should be undertaken as the first step, at least, in dealing with primary dysmenorrhea in adolescent girls.

### TWO HEALTH PROGRAMS

With this in mind, I have drawn up the following two health programs—one to be used by the corrective physical education teacher at school, and the other to be followed by the girls at home; these programs, I felt, had to be simple, applicable on a large scale, and within reach of the needy girls who made up the majority of my patients:

#### I. FOR USE IN SCHOOL BY THE TEACHERS

Rest, instead of physical education.
Excuse from extra school duties.
Help the girl to receive free milk, lunch, cod-liver oil, and transportation, if the family is not able to supply them.
Corrective physical exercise after improvement has taken place.
Regular physical training not earlier than several months after the symptoms have entirely disappeared.
Psychotherapy.

#### II. FOR USE BY THE GIRLS AT HOME

Rest an hour after returning from school.
Go to bed not later than nine o'clock.
Take a warm bath three times a week.
Avoid strenuous exercise and dancing.
Do not walk long distances.
Drink a cup of hot water before breakfast and before supper.
Drink two cups of milk or more daily.
Eat daily a raw apple, a raw carrot, and two oranges.
Take a tablespoonful of Maltine, with iron or iodid after breakfast and after supper.
Take a tablespoonful of karo syrup in water, twice daily, one week before the expected menstrual period.

In both programs, I have emphasized the importance of rest. Contrary to the opinion of some authors, I find that most girls who have menstrual pain and are also undernourished, nervous, and overworked at home, improve better when allowed to rest rather than when compelled to exercise.

The program suggested for use at home provides, along with rest, an ample supply of vitamins, iron, fats and carbohydrates, with an extra supply of the latter prior to the menstrual period,[5] and encourages also good elimination through the skin, kidneys, and bowels. The girls who were overweight were given corrective exercises and Blaud's pills, instead of Maltine. By providing for the betterment of the general health of the girls, this program may also bring about an improvement in many endocrinopathies, hypoglycemias, and create a better resistance to allergic factors, and also a more stable nervous system.

During the past two years, between the months of January and June, I have tried out the above-outlined programs on 215 high school girls, and on eleven mentally retarded girls attending a development school. All these girls came from poor homes, and none could afford private medical care. The attendance office and the nurse referred to me those girls who had been absent from school because of menstrual pain, or, for that reason, were spending most of the day in the rest rooms. The selected pupils were assigned to special rest classes conducted by the corrective physical education teacher. Milk, Maltine, and transportation were given gratis by the schools to those who could not afford them. Every few months I questioned these girls to find out what progress they were making. The stubborn cases were referred to the clinic for more thorough examination. At the end of each semester I interviewed all the girls who were under observation and received most gratifying reports, which were confirmed by the attendance office or the nurse.

### SUMMARY CONCERNING STUDENTS UNDER OBSERVATION

The compiled studies in all the schools were as follows:

#### BEGINNING IN JANUARY

226 girls were under observation.
141 of these girls were absent from school because of dysmenorrhea.
85 of these girls were lying down in the rest room for the same reason.

#### ENDING IN JUNE

171 girls had completely recovered.
32 girls had improved, having still to lie down in the rest room, but were not absent from school.
23 girls had not improved. Eighteen of these girls were in the absent group, and five were in the lying-down group.

#### SUMMARY OF RESULTS

75 per cent recovered; 15 per cent improved; 10 per cent not improved.

### OTHER PROCEDURES

In order to carry on my experiment on a wider scale, I devoted two hours every week during the past year to the school clinic, where teachers, school physicians, and nurses from various schools referred students who were subject to dysmenorrhea, and were usually absent from school for that reason. A physical examination was made on every girl, and laboratory work was done when necessary. If decayed teeth, diseased tonsils, defective vision, or other defects were found, the girls were referred to the corresponding clinics. No pelvic examination was made on these girls at their first visit to the clinic, unless there was a definite indication for doing so.

A health program, accompanied by a talk to the patient and her mother on the possibility and importance of getting well soon, were given to every girl. If at the second visit no improvement was reported, a rectal examination was made, but pelvic pathology was seldom revealed.

In order to give courage to the girl to go to school at a time when she never before attempted to do so, Anacin tablets were given in several instances to be used at the beginning of the following period. This study in the clinic was carried on from September, 1936, to May, 1937, when a questionnaire was sent out by the clinic to some of the schools which had referred girls for treatment. The replies followed promptly. Some were supplemented by complimentary remarks from teachers and mothers. The results were as follows:

A total of sixty-seven girls were investigated, seven left school before recheck.

A total of thirty-six girls recovered, seventeen improved (were no longer absent during the menstrual period), and eight girls did not improve.

RESULTS

Sixty per cent of the girls recovered; 28 per cent improved; 12 per cent did not improve.

COMMENTS

1. From 6.3 to 17.5 per cent of adolescent girls are subject to dysmenorrhea severe enough to require rest in bed or limited activity.

2. Constitutional inferiority and a morbid mental attitude are coexisting factors in many cases.

3. A health program which provides for abundant rest, proper exercises, correct diet, and good elimination, is beneficial in these cases.

4. Some 286 girls were treated according to the above program, with the results that 72 per cent recovered, 17 per cent improved, and 11 per cent did not improve.

IN CONCLUSION

Since simple rules of wholesome living and a normal attitude toward menstruation bring about a cure or improvement in the majority of cases, the control of dysmenorrhea among adolescent girls can be achieved to a great extent by the school physician through health education. Then only the small number who fail to improve under the health program will have to be referred for further medical study.

1313 Edgecliff Drive.

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DISCUSSION

C. Morley Sellery, M. D. (1467 Oakhurst Drive, Beverly Hills).—Doctor Goldwasser has made a real contribution to school-health education. She has demonstrated the excellent results which can be obtained in the treatment of primary dysmenorrhea among adolescent schoolgirls by careful attention to general health measures and the education of each patient in the details of an improved personal hygiene. Doctor Goldwasser's study is a valuable reminder that much can be accomplished by adherence to the simple yet fundamental laws of health.

I am much impressed with the importance of competent medical supervision in the field of health education. Undoubtedly, the 226 girls under observation at school had received considerable health instruction through the classroom teacher and the physical education department. No doubt this teaching was of value in preparing the ground for the message of the school physician. It is important to note, however, that until the school physician outlined a definite health program and coördinated the various health facilities in the school, 141 girls out of the 226 were absent from school each month because of dysmenorrhea. As a direct result of Doctor Goldwasser's health supervision, 75 per cent of these girls recovered and 15 per cent were improved. This shows the practical results which can be obtained by health-teaching under medical direction.

Doctor Goldwasser has stressed the need for rest in the early stages of treatment for dysmenorrhea. She has quite properly urged corrective physical exercises after improvement has taken place, and regular physical training not earlier than several months after improvement. Probably this is the most difficult stage in the physical rehabilitation of these cases. The mother and daughter have believed for so long that physical exercise is harmful that it is difficult to persuade them to make the last step from semi-invalidism to normal exercise and activity. I feel that in many of these cases the permanence of cure or relief from symptoms depends on finally building up the general muscle tone of the body through big-muscle activities. With good general muscle tone, the tendency to pelvic congestion and dysmenorrhea is much lessened.

Doctor Goldwasser's study was carried on among girls from underprivileged homes. In better-class districts, similar results should be obtained by close coöperation with the family physician and the parents.

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Etta Gray, M.D. (649 South Olive Street, Los Angeles).—I am much interested in the simple health rules which Doctor Goldwasser has outlined for treatment, with her reports of a large percentage of cure.

To my mind, a great many such cases of dysmenorrhea may be treated by simple procedure of hygienic routine, and most satisfactory results are obtained.

Aside from these 60 per cent of persons so cured by simple methods, we find a certain number suffering from what can be definitely attributed to endocrine conditions. These individuals should be differentiated and studied. Certainly, marked success may be had in these cases of dysmenorrhea if they are given the adequate endocrine therapy. However, as stated by the writer, only a certain per cent of girls ailing from dysmenorrhea require more than simple therapy as outlined in this paper.

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N. Kavinoky, M.D. (1930 Wilshire Boulevard, Los Angeles).—Most thinking physicians are very conscious of the part which sexual neurosis plays in both the individual question of the health of the woman and the social question of the stability of the family. The added financial responsibility which many women are carrying today furnishes another reason for giving serious consideration to the question of dysmenorrhea.

Some of the neuroses have had their origin in the same causes which produced the dysmenorrhea, while others are in great part the result of our older methods of treatment of this condition.

In the balancing up of the diet and the development of habits of nutrition, which Doctor Goldwasser stresses in her approach to this problem, she has accomplished a great deal more than just the treatment of dysmenorrhea. The establishment of these positive health habits and attitudes

is not only a benefit to the general health of the woman, but is an important factor in the prevention of disease. Exercise, especially along the lines of the Mosher exercises, which are simply contraction of the abdominal and pelvic muscles, is a valuable therapeutic aid which can be easily learned by any girl or woman. An endocrine study of a case is of aid in making a more exact analysis of the condition, but it should come after the nutritional program has been established. Today so many women are overstimulated and are overtaxing their energies that the importance of rest cannot be too much emphasized. We need not only to allow a period for rest in the time budget, but we need to teach our women how to relax—how to rest.

The program of health education in the schools which Doctor Goldwasser has described is another step forward toward the improvement of the health of the community. Her recommendations are a valuable aid not only to the private practitioner, but especially to those of us who are interested in public-health work and in raising the level generally of woman's physical well-being.

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## PSYCHOPATHIC PERSONALITY: AS A HOUSEHOLD PROBLEM*

*By* Edward W. Twitchell, M.D.
*San Francisco*

Discussion *by Ross Moore, M. D., Los Angeles; Walter F. Schaller, M. D., San Francisco.*

Those whom we call psychopathic personalities must, of course, have been recognized for ages past, but a little more than a hundred years ago they began to attract the attention of such men as Pinel and Esquirol in France, and Prichard in England. To Prichard we owe the term "moral insanity," which is found, even today, in our literature, and in that of Germany and of France as well. Many of those once grouped under the heading "Moral Insanity" would today be called mild hypomanics, paranoids of the quieter type or occasionally early paretics. The French continued the study of these people under the names of "folie raisonante" and "dégénérés," and it must be the work of Morel and Magnan, and possibly Janet, to whom Kraepelin expresses his indebtedness, in his chapter on the Psychopathic Personalities. Morel, Magnan and, later, Koch laid much stress on the so-called stigmata of degeneration, particularly the physical stigmata. These physical stigmata were such things as facial asymmetry, abnormalities in the shape of the ear, malformations such as harelip, polydactylia and the like; then there were also tufts of white hair, cowlicks, and double crowns. One could go on at great length enumeratting such stigmata. Color blindness was a sensory stigma, and as this was known as Daltonism, those with an inherent ethical defect were known as examples of ethical Daltonism. There were even obstetrical stigmata, such as a tendency to ectopic pregnancy. These were the days of Lombroso and Max Nordau, whose work is now in large part forgotten. There was nonetheless a good deal of value in this work, and it would be wrong to ignore it completely.

### KOCH'S STUDIES

In 1889, J. L. A. Koch published a short guide (Leitfaden) to Psychiatry, and in it was a chapter on the psychopathic inferiors (Minderdwerthigkeiten). This chapter was expanded, and in 1891-1893 appeared as a monograph in three sections. Most of our present work harks back to Koch, though he has now, as Kurt Schneider remarks, only an historical interest. The term currently used in all of the Government services, "constitutional psychopathic inferiority," is really but a translation of Koch's designation. For Koch almost any sort of physical peculiarity was indicative of degeneration, and one frequently finds in his histories the remark, "Flecks of pigment in the iris." This to him was highly significant. He divided all his "inferiors" into two main classes—the Permanent and the Transient—each of the two main groups being again subdivided according to severity into Psychopathic Disposition, "Belastung," and Degeneration. Kraepelin's long chapter, in the 1915 edition of his work, is today often criticized as taking a viewpoint too exclusively clinical, and the classification is objected to as purely descriptive of behavior, and Kahn makes the same criticism of Schneider, although he gives him credit for attempting to "deepen the psychological insight." Kahn's own classification, which he calls an heuristic one, may give one a better idea of the mental mechanisms involved, and one will have no great difficulty in fitting into it the grouping of Kraepelin or Schneider; still the clinical classifications are excellent working tools. As a matter of fact, classifications here, just as in other departments of psychiatry, have little worth, though they serve as a convenience in certain junctures. They are much like platforms of political parties, to be ignored when they become annoying. It is interesting to see how all-embracing some of the classifications are. In Willmann's, one may find headings for menstrual depression and for homesickness.

### ENGLISH LITERATURE

When one considers how numerous these patients are and the long while they have been generally recognized, it is remarkable how little has been written in English. In Schneider's Bibliography of 304 items, dated 1922, the only article in English mentioned is Beard on Neurasthenia, and Kahn, though translated into English and published at Yale in 1931, does not cite one. Allowing for the German tendency to ignore everything done outside of Germany, worse, of course, since the war, this means that relatively little has been done in English.

Take up any of the textbooks of the day, English or American, and you will find the whole subject compressed into a few pages, sometimes into a few paragraphs. There are plenty of journal articles on this or that aspect of the question, but a systematic presentation in English has yet to appear.

### THE PSYCHOPATHIC PERSONALITY IN YOUTH

The psychopathic personality is ubiquitous, but the handling of him, in his youth at least, devolves upon three agencies—the home, the school, and the courts. Many make a sort of orderly progress from home to school and thence to the court, the court either sending them back to home or school, or on

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