Communications

Incidence of Asymptomatic Gonorrhea in Women

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It is generally known that the incidence of venereal disease has been increasing in recent years. Pennsylvania Health Department figures show 26,000 gonococcal infections in 1974 and 29,000 in 1975. Since then there has been a slight decrease to 28,000 in 1976 and 27,300 in 1977. Nationally, the overall incidence of gonorrhea is 285 per 100,000, while in cities it may be as high as 610 per 100,000. An apparent increase in promiscuity has been found to be a risk factor in the spread of gonorrhea.

Fortunately, increasing numbers of young people are presenting themselves for diagnostic examination before irreversible damage is done. Perhaps this is due to a decrease in the social stigma surrounding a diagnosis of veneral disease, or is a reflection of the wider availability of diagnostic outpatient clinics and health centers. However, many women with gonorrhea remain asymptomatic and are diagnosed only by cultures during routine pelvic examinations. This report analyzes the symptoms or lack of symptoms in 66 culture-proved cases of gonorrhea in women over a ten-month period.

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Method

Hamilton Health Center is a group family practice located in center city Harrisburg, Pa, and serving a broad-based population, including private payers, those on medical assistance, and the medically indigent. A cervical culture for gonorrhea is performed routinely on all women who undergo pelvic examination. A state venereal detection program supplies free culture media (Thayer-Martin with trimethoprim) and laboratory interpretation. From June 1975 through April 1976, 1,518 cultures were performed on women, of which 70 were positive for gonorrhea (4.5 percent). Sixty-six of the 70 female cases were studied retrospectively by reviewing the medical record and grouped according to symptoms. Data could not be found on the other four female cases.

Results

The 66 cases studied were placed into groups according to their chief complaints (Table 1). Twenty-six of these women were classified as asymptomatic—women who came simply for family planning or a Pap test with no other voiced symptom. Thirty-two women came with the complaint of vaginal discharge only.

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Discussion

Millar reported in 1973 that one out of five women infected with gonococcus develops pelvic inflammatory disease (PID) if untreated. Over half of these women are hospitalized, half of which require pelvic surgery. He estimated that 122,000 American women required pelvic surgery in 1973 due to complications of gonorrhea.[2] The present study revealed 66 infected patients in a ten-month period. Twenty-six (39 percent) of these were asymptomatic—unaware of any disease. Had they not been detected by a routine culture procedure, one fifth, or five patients, may have developed PID and three of them may have required hospitalization. Also, they could have spread the disease to countless numbers of unsuspecting sexual partners. An additional three patients also were symptom free, but presented because they were told they had contacted or caused gonorrhea. Together, these two groups comprise 44 percent of the patients.

Table 1. Presenting Symptoms in 66 Cases of Gonorrhea in Women

Group	Symptom	Number	Percent
I.	Asymptomatic	26	39
II.	Asymptomatic but known VD contact	3	5
III.	Vaginal discharge only	32	48
IV.	Vaginal discharge with abdominal pain	2	3
V.	Abdominal pain only	2	3
VI.	Back pain only	1	2
	Total cases reviewed	66	100

Experience at Hamilton Health Center has revealed that many women consider a vaginal discharge to be "normal" for them. Some of the women in Group III admitted to vaginal discharge only after careful questioning. They had come to the physician primarily for other reasons, eg, family planning. Some of the women in Group I were found, on examination, to have a discharge even though they denied it or did not consider it at all abnormal for them. Group I (asymptomatic) and Group III (discharge only) combined comprise 58 patients, or 87 percent of these infected women. Most of these pain-free women were unaware of any serious or potential problems. This figure correlates with a published report that 75 percent of women with gonorrhea are asymptomatic.[3] Eschenbach pointed out in a recent article[4] that some of these asymptomatic patients may have had symptoms earlier and ignored them. He also says they may have had gonorrhea symptoms not recognized as such, eg, mild vaginal discharge, urethritis, break-through bleeding. He believes the incidence of truly asymptomatic gonorrhea is much lower than 75 percent.

The authors believe these figures justify their practice of culturing all sexually active females for gonorrhea with each pelvic examination. Other practice settings must establish their routine procedures by monitoring their own culture results. Private physicians as a whole in Pennsylvania returned only 1.12 percent positive cultures. This compares to Hamilton Health Center's 4.5 percent positive or State Venereal Disease Clinics' 15.4 percent positive cultures for gonorrhea (Table 2).

To aid physicians who must be selective in their use of culture media, the Pennsylvania Health Department has released a list of priorities to all gonorrhea screening centers (Table 2). The most likely candidate for a positive culture is a female

Table 2. Selective Use of Culture Media and Testing for Gonorrhea*

Priorities

1. Test every female who has been exposed to a venereal disease (states she is or is named as a contact)
2. Test every female who has had a venereal disease in the past year
3. Test every female who has current or past signs or symptoms suggestive of a venereal disease
4. Test every female who specifically requests a test for venereal disease
5. Test every pregnant female—once at first visit, and once near term

* From a written communication from E.J. Powers, Program Director of the Venereal Disease Section of the Pennsylvania Department of Health, April 12, 1976.

who states she is a contact of gonorrhea. Nationwide, 36 percent of these individuals are infected.[5] Females who are known contacts of syphilis also yield positive gonorrhea cultures in 2 to 20 percent of cases (Table 2).

Summary

Sixty-six of 70 consecutive cases of gonorrhea in women were reviewed retrospectively for presenting symptoms. Forty-four (44) percent were asymptomatic while an additional 48 percent mentioned only a vaginal discharge. The importance of taking routine gonorrhea cultures on all sexually active women is stressed. In medical settings where experience has shown a low yield of positive cultures, the Pennsylvania Health Department's priorities can be used to select the patients at highest risk of disease.

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Coping with Stress in Family Practice Residency Training

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Training for a career in family medicine at a university teaching hospital offers residents some unique and rewarding educational opportunities. Such a program can also subject residents to certain stresses, one being a loss of identity with each other and the family medicine department and faculty. This problem has been discussed by Burr,[1] and more recently by Werblun et al.[2] They described one approach to dealing with this problem in their university hospital residency programs.

Approximately three years ago a similar problem of lack of identity was recognized among family medicine residents at the Milton S. Hershey Medical Center of The Pennsylvania State University. An approach was developed to deal with this problem as well as to help residents cope with other stresses during their training, stresses of both a personal and a professional nature.

Problem

The residents experienced the same frustration described by Werblun, a heavy inpatient workload causing a sense of frustration in having to see patients in the Family Practice Center. The faculty also observed that many residents seemed to identify more with faculty in other specialties than

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with family medicine faculty. While this may not necessarily be undesirable, it did tend to generate a feeling in many residents of not having anything to learn from the family medicine faculty or from their experience in the Family Practice Center. Additionally, two residents left the program to enter other specialties.

One Solution

To deal with this problem of identity and also to provide mutual support for first year residents during this most stressful period of their training, a combined resident-faculty support group was created in July 1975. The specific objectives of the group were to: (1) foster a sense of *esprit-de-corps* among new residents, (2) provide opportunities for personal growth and development, (3) provide opportunities to learn more about human interactions.

The group idea was introduced to residents during their orientation to the department the day before the start of their residency. Initially, all members of the group were expected to attend all meetings except for vacations, sickness, or emergency situations. Members wishing to leave the group were asked to share with the other participants their reasons for leaving. The groups were held for one and a half hours weekly, prior to the start of the residents' family medicine patient care time. The Chairman of the Department of Humanities at The Pennsylvania State University College of Medicine functioned as facilitator. Faculty and residents participated as equals with no attempt to structure the group "for the residents." A nondirective format was followed with initial sessions serving to introduce group members to each other. Subsequent sessions tended to focus on stresses experienced by residents on various specialty rotations, personal problems, interpersonal communication, and interpersonal interactions.

Results

Most members of the group, both faculty and residents, felt their participation was a reasonably positive experience. Approximately six months after the start, one faculty member and one resident decided to withdraw. Otherwise, the group membership remained intact. Participants felt the group accomplished the objectives mentioned above. At the completion of the first year, the residents and certain faculty decided the experience was of sufficient personal value to continue on as a "second year support group." With the current 1977-1978 academic year, the residency program has continued two groups, one composed of first year residents, third year residents, and faculty, and one composed of second year residents and faculty. Both groups have the same facilitator and meet weekly for approximately 90 minutes.

Since this group support system was begun in July 1975, the residency program faculty have noticed a definite attitudinal change in the first year residents. It is felt the residents have more of an identity with each other and with the Department of Family and Community Medicine, seem more committed to caring for family medicine patients in the Family Practice Center, and relate better to each other, the faculty, and other health care workers in the Family Practice Center. The residents and faculty who have participated in these support groups have felt they provided a meaningful experience and that the objectives listed above were met. Several residents have expressed the opinion that participation in this support group process was one of the most positive aspects of their training as physicians.

Summary

The faculty-resident support group described in this communication has met a definite need in the family medicine residency program at the Milton S. Hershey Medical Center. In addition to contributing to an increased sense of identity for residents in the program during their difficult first year of training, it has helped residents and faculty develop better understanding of themselves as physicians and individuals. Group participation has enabled most persons to improve communication and interpersonal skills and to cope better with stresses of a professional and personal nature. The faculty and staff have found this process to be a most rewarding and worthwhile addition to the residency program.

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