

# Gonorrhoea

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THIS TRANSFER MADE: 12/28/05

LENGTH: 00:27:45

FEDERAL SECURITY AGENCY  
UNITED STATES PUBLIC HEALTH SERVICE  
PRESENTS

A FILM FOR PHYSICIANS  
IN TECHNICOLOR

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GONORRHEA

FOREWORD

GONORRHEA HAS BURDENED MANKIND WITH SUFFERING AND LOSS DOWN THROUGH HISTORY. EVERY DAY IT IMMOBILIZES THOUSANDS OF OUR MEN IN FACTORY, IN FIELD, AND IN THE ARMED FORCES. UNTIL A FEW YEARS AGO

THE PHYSICIAN COULD DO LITTLE TO PREVENT THIS. BUT NOW, WITH OUR NEW KNOWLEDGE, WE CAN MAKE GONORRHEA A RARE DISEASE.

OUR HOPE IS THAT THIS FILM WILL STIMULATE INTEREST IN THE CLINICAL MANAGEMENT AND CONTROL OF GONORRHEA.

THOMAS PARRAN  
SURGEON GENERAL  
UNITED STATES PUBLIC HEALTH SERVICE

GONORRHEA IN THREE SECTIONS  
DIAGNOSIS  
CHEMOTHERAPY  
PROPHYLAXIS

#### DIAGNOSIS

*In diagnosing gonorrhoea, we are concerned not only with the clinical and epidemiologic evidence but laboratory evidence as well. All physicians however may not be equipped for laboratory diagnosis. In such circumstances, it is wise to act on a provisional diagnosis based on history and symptoms while waiting for laboratory confirmation. True diagnosis rests on finding the gonococcus by study of cultures and smears, or, to use the word that is gaining preference: spreads. Since facilities for culture study are not available to all physicians, many must depend upon the spread alone.*

*In any case, our concern is to secure material for laboratory study. The profuse discharge of acute gonorrhoea makes this a simple routine matter, both in the male and in the female. However, a thick spread makes study difficult. So, special care should be taken to make the spread for Gram staining thin and uniform. This is best accomplished by rolling the material in the manner shown here.*

*The story is quite different in chronic gonorrhoea in both sexes, when the profuse discharge is not present. Then it is often extremely difficult to secure material for study. Yet, here, careful diagnosis is most important. Chronic gonorrhoea is a focus of infection and a constant source of new cases of gonorrhoea. As diagnosticians, we must be familiar with those structures where the gonococcus may be found and with the techniques for stripping them. In the male, these structures that harbor the gonococcus are the urethra, the prostate, Cowper's glands and the seminal vesicles. Stripping these structures will yield material for study. Of course, it is realized that procedures for stripping these structures are dangerous in the presence of acute gonorrhoea, and that they belong only to the chronic stage of the disease and among the tests for cure. Stripping the urethra is a simple and familiar procedure. The prostate, however, being highly susceptible of trauma, requires gentle and correct massage. The safest and least painful method is to pass the finger well up over the lateral lobe, bringing it down in the direction parallel to the midline. After both lobes are thus emptied, the finger is passed well up beyond the median sulcus of the prostate and brought several times from there to the anterior extremity of the gland. In this form of massage, the dangers of complications are*

reduced. The patient's comfort is perhaps the best guide as to the degree of pressure to be used. Wisdom will always err on the side of gentleness. Cowper's glands through manipulation may also yield material for study. To find the gland, the tip of the finger is drawn down over the arch of the pubic bone about one half inch to the side of the midline. As it drops from the edge of the bone, it will, particularly in thin patients, fall into a triangular depression. The gland is easily felt by rolling the intervening tissues between the finger and the thumb. Gently rolling the intervening tissue will express secreta lurking in the gland. The seminal vesicles when stripped also provide material for study. However, since the prostatic secretion always contains pus when the seminal vesicles are infected, it is rarely necessary to strip them. Stripping is resorted to when vesiculitis is suspected. But the physician should wait until the acute stage of the disease is passed and the chronic stage has been reached. Only then can digital expression of the vesicles be done safely. To strip the vesicles, extend the finger beyond the prostate and to the side of the midline, and bring it downward and toward the midline as shown here.

With the use of these techniques, material for spreads and cultures may be obtained from the urethra, the prostate, Cowper's glands and the seminal vesicles. Secretions obtained by stripping any of these glands are collected in sterile broth for culture studies and stained for microscopic examination. Of course, preparation of the material for laboratory study presents no problem when the specimen is ample. However, stripping the urethra, the prostate and Cowper's glands may at times yield only a scanty discharge, and in such cases the following method may be used to prepare material for study. After stripping the various structures, secure the first half ounce of urine voided. Then centrifuge the urine and invert the tube so that the urine flows out leaving the sediment in the tip of the tube. Then place a very small amount of normal salt solution in the tube, and shake well so that the sediment is suspended in it. Then centrifuge again. Invert the tube and obtain sediment from its tip for examination. This material is subjected to spread examination and where available, culture studies. So much for the male.

Now, to secure material for studying chronic gonorrhoea in the female, material may be obtained from the urethra, from the endocervical glands and from Skene's and Bartholin's glands. To secure material for study from the urethra, the urethra meatus is wiped with cotton to remove vulvar secretions. The gloved finger is then inserted into the vagina and the urethra is stripped from above downward, the external meatus being pressed rather firmly against the pubic bone. A small cotton-wrapped applicator is inserted about half an inch into the urethra. The applicator should secure enough material for stain and culture. Secreta from Skene's glands is expressed by the procedure just described. No additional massage or manipulation is necessary. In obtaining secreta from Bartholin's glands, first wipe the area of the duct with cotton. Then insert the index finger a short way into the vagina and place the thumb on the outer side of the labia majora. The intervening tissue is then gently squeezed. When secretion is obtained in this way, it is usually too scanty to be secured on an applicator. The flat end of a toothpick or a platinum loop is better suited for this purpose. In obtaining material from the cervix, it is well to remember that in a chronic stage of the disease, the gonococci are deep in the end of cervical glands and usually not in the plug of mucus filling the canal. Thus, it is best to cleanse this canal with cotton held in a sponge forceps. Then, make firm pressure on

*the cervix with blades of a bivalve speculum and obtain the material thus expressed for study. If spreads of these secretions are thin and uniform, examination will be facilitated. If we rely on the techniques described, we will find that material for test and study is always available. All of these materials from the male and the female can of course be used both for cultures and spreads.*

## COMMUNITY LABORATORY

*Mastery of these techniques will help provide laboratory evidence for diagnosis and, what is equally important, laboratory confirmation of cure. But, as the laboratory checks the clinical symptoms in general treatment, so in the case of chronic gonorrhoea in the female, the clinical symptoms and case history must be used as a check on the laboratory. This is necessary because, in chronic gonorrhoea in women, the gonococcus will sometimes escape detection by both the Gram's stain and the culture. Consequently, when the history is suspicious and symptoms persist, the laboratory must be challenged, perhaps repudiated.*

*In the case of the female with chronic gonorrhoea, we must be guided by epidemiologic and clinical evidence as well as by laboratory evidence. If symptoms and history point to the gonococcus, treatment is definitely in order.*

*To withhold treatment is to risk new infections and grave complications for the patient.*

*In any case, the procedure of treating on suspicion cannot be challenged. We all know patients who come for examination and never return. We know that often, we have a positive diagnosis from the laboratory but no patient. To treat on suspicion, to warn at once that an infectious disease may be present and to urge the patient to act accordingly, is to move toward gonorrhoea control. Certainly, where infectious diseases are concerned, every physician feels that his responsibility extends beyond his patient. It extends to the people the patient may infect.*

*Since diagnosis is an integral part of the patient's first visit and this first encounter with the physician has a profound influence on the patient's later behavior, it may be in order to discuss further at this point the patient and his doctor. Effective venereal disease control and good case holding rest on the doctor-patient relationship and require that the patient be considered as a total medical problem. The patient must be given an understanding of the nature of his problem and he must be given an objective which will impel him to continue treatment. The patient may have syphilis and maybe other complications. Certainly, in a patient with gonorrhoeal infection, syphilis must be considered.*

## EXPOSURE

*Ideally, the history of gonorrhoea case follows these general lines. The patient usually comes to the doctor's office three to six days after exposure when the symptoms appear. Following the examination, the doctor takes material for a spread.*

## EXAMINATION SPREAD- BLOOD TEST

*He also takes a blood test for syphilis as part of the physical examination. It is too early to check for a syphilitic infection which may have been contracted when gonorrhea was contracted but the doctor explains that the danger of such an infection exists. If possible, the doctor then gets the name of the contact and speaks of bringing her on the treatment. He also explains the nature of the disease to the patient in language the patient can understand. The patient returns in three days for a second examination and to learn the laboratory findings. Let us assume that the findings of the test for syphilis are negative. The smear, however, is positive. Since treatment began with the first visit, the doctor now simply checks the progress of the disease.*

## SEVEN DAYS

*Seven days later, the symptoms of most patients will have vanished. But now, enough time may have elapsed for penile lesions to appear. If the patient also contracted syphilis, the doctor looks for lesions, and if he finds them, does a dark-field test at once. Let us assume that no lesions are found this time. The patient returns again in seven days for two reasons: so that the doctor can check the gonorrhea cure and look for penile lesions again. We assume that again no lesions are found. The patient returns and is re-examined for infectious lesions at weekly intervals for three weeks. Thereafter, every two weeks for another six weeks. A second blood test is part of the final examination. We have thus completed a three-month period of observation. The course of action described here has given the patient the fullest possible protection. His gonorrhea cure has been determined. The physician has also determined whether or not there was a syphilitic infection. The results are good case holding and effective venereal disease control. These are objectives that must be attained. We know only too well that they will never come to us from the laboratory, but only from an appreciation of human relationships.*

## CHEMOTHERAPY

*When we speak of chemotherapy, we speak of the weapon with which a change in history has been wrought. We speak of a swift, sure and inexpensive cure for gonorrhea. Chemotherapy in gonorrhea has made difficult and painful local treatments unnecessary, except in the small number of patients who do not respond to such medication. It is a great boon of the private physician, the clinics carrying heavy caseloads, often with extremely limited personnel. And of course, it is a great boon to the patient. In discussing this new treatment, it may be well to recall an error of the past in order to dispose of it permanently for the future. Sulfanilamide was the first sulfa drug used in the treatment of gonorrhea. Although toxic reactions were frequent and sometimes grave, it continued in use for a time because a better substitute was not yet found. Because to tens of thousands infected with gonorrhea, it offers the promise of a swift cure, a swift return to the jobs from which the disease had taken them. This early sulfonamide compound held out a hope to gonorrhea sufferers. But, sulfanilamide produced toxic reactions in many patients and created numerous asymptomatic carriers. Laboratories focused their attention on finding a safer and more effective chemotherapeutic agent. New sulfa drugs were produced rapidly, drugs superior to sulfanilamide. As these more effective*

*drugs appeared, leading clinicians in the United States Public Health Service abandoned sulfanilamide. But sulfanilamide had been widely publicized, and so it gave way but slowly to more effective, safer drugs.*

## PRESCRIPTIONS

*Doctors continue to prescribe it, patients continue to ask for it but there is no place for sulfanilamide in the treatment of gonorrhoea.*

## SULFATHIAZOLE

*Today, a drug of choice is sulfathiazole. But research and experience indicate that it may be entirely supplanted by penicillin.*

DATA ON DOSAGE OF PENICILLIN MAY BE OBTAINED FROM YOUR STATE HEALTH DEPARTMENT OR THE UNITED STATES PUBLIC HEALTH SERVICE, WASHINGTON, DC.

*The toxicity of penicillin is negligible. The toxicity of sulfathiazole is low and the reactions are mild. Rarely does a patient find it impossible to consume enough of the drugs to bring about a cure. Even when low blood concentrations are maintained, the relatively high cure rate is achieved. Of course, there are a few people who cannot tolerate any of the sulfa drugs in any concentration and so, all patients must be watched. This is no drug to be sold over a counter without a prescription. Twenty grams is the recommended dosage for a single course of treatment: four grams a day for five days. However, if this first course of sulfathiazole fails to bring about a cure, medication should be discontinued for seven to ten days, and then, a second course of treatment given. A number of patients will not be cured, penicillin should be considered. Penicillin therapy of gonorrhoea may mock or delay symptoms of syphilis. Patient observation should be continued over three months. As a special precaution against transmitting a possible chronic infection, the physician should insist that a condom be used at every sexual contact for three months after disappearance of symptoms. With the aid of these drugs, we can in a short time make gonorrhoea a comparatively rare disease.*

## PROPHYLAXIS

*Prophylaxis is the other great ally of gonorrhoea control. Civilian and military health authorities now recognize its value and urge its wide spread use. To make descriptions of approved techniques available to physicians, these publications have been prepared, now furnished upon request. The greatest safety in preventive measures other than continence belongs to the condom. But improper use of a condom destroys its value.*

## THE CHEMICAL AND MECHANICAL PREVENTION OF SYPHILIS AND GONORRHEA

### 1. SAFEST METHOD

- a. USE A CONDOM OF STANDARD TYPE.
  - b. THOROUGHLY WASH THE GENITALS AND ADJACENT PARTS WITH SOAP AND WATER AS SOON AS POSSIBLE (THE SOONER THE BETTER, BUT WITHIN 1 HOUR AT MOST) AFTER REMOVAL OF THE CONDOM.
2. IN THE ABSENCE OF A CONDOM.
- a. THOROUGHLY WASH WITH SOAP AND HOT WATER AS ALREADY...

*Instruction of the patient is part of the physician's role in implementing prophylaxis. Common habits such as using a condom only at the end of intercourse should be condemned. The patient should also be warned to put on the condom before his hand comes into contact with the woman's genitalia, lest he carried the infection to his own organs before intercourse has begun. These and other points need to be impressed on the patient. The pamphlet shown is intended for lay education and can also be secured from the United States Public Health Service. The prophylactic packet is sometimes effective but here again, a patient needs instructions as to its proper use. Chemical prophylaxis is most effective when administered under medical supervision. When administered soon after exposure, it is at least 90% effective. Prophylactic measures are not as easily applied in women, nor are they considered to be as efficacious. There is no doubt that wide spread use of prophylaxis will aid materially in controlling gonorrhoea. Education of the public, so that people will not go to the quack but to the licensed physician, early diagnosis by the physician, correct use of prophylaxis, sulfathiazole, penicillin, these things are weapons in the hands of the medical profession. And most important in gonorrhoea therapy, let us remember this: the laboratory is not infallible. Clinical and epidemiologic findings are ample grounds for treatment. If we use them as a basis for treatment, we will eradicate many infections that in the past filtered through the diagnostic net. Certainly, sulfathiazole and penicillin are a promise and a challenge to the medical profession, an opportunity to wipe out one of our oldest diseases and an opportunity to save millions of man days lost to industry and the armed forces, to prevent a great loss to the nation's health and strength.*

THE END

NOTE: ALL CHARACTERS IN THIS MOTION PICTURE ARE PORTRAYED BY PROFESSIONAL ACTORS.

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HUGH HARMAN PRODUCTIONS, INC.

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