tetic, hygienic—in short, rational—with an alkali if the urine is overacid. The sooner the urethral discharge is controlled the more quickly will the rheumatic symptoms cease, although the latter may outlast the former many months. Rest is most important, the joint being splinted in the acute stage. Leeches, hot fomentations, or a blister will soon bring on the subacute stage, if indeed the inflammatory phenomena have not been subacute from the first. The diet should be low while the patient is confined to bed. Probably the best early treatment in acute and subacute cases is absolute rest with hot fomentations, the joint being first lightly rubbed with pure salicylate of methyl, then wrapped up in moist hot flannel and covered with gutta-percha tissue, while large doses of the oil of wintergreen are administered internally, and energetic local treatment is employed to cure the urethral discharge. Sometimes pure ichthyol spread over the joint seems to work fairly well in the earlier stages, but nothing can be surely counted upon as helpful unless the urethral discharge is controlled.

In the later stages, when hydrarthrosis is established and threatens to become chronic, the surgeon must face a serious responsibility, for the integrity of the joint is involved in the ultimate issue.

In my opinion, no treatment for this condition can be compared to the irrigation of the joint with hot bichlorid-of-mercury solution at a strength of 1:5,000 to 1:1,000. I used this many years ago upon the knee-joint, making two punctures with rather large trocars, one on each side of the joint (for the fluid is not always limpid, but may contain viscid and clotted fibrinous material), and first thoroughly washing the joint cavity with prolonged hot-salt irrigation, and then with two quarts of a bichlorid solution, and putting it up under moderate pressure, later using blisters or the Paquelin cautery, and finally elastic pressure.

That these cases are serious is shown by Halstead's statistics given in Young's[1] paper. Halstead opens the joint, irrigates with bichlorid, and then closes the joint with sutures. He reports 11 cases with the result—cured 3, improved 2, ankylosed 1, not improved 1, not stated 4.

In acute bursitis I know nothing so good as the Paquelin cautery or a blister generously applied.

In chronic cases, wherever situated, the choice in local treatment lies between tincture of iodin, ichthyol, Paquelin cautery, and repeated small blisters, followed by rubber bandage, massage, hot and cold douches, Russian and Turkish baths.

[1] *Loc. cit.*

Finally, in very chronic cases a mercurial course sometimes assists, and the iodid of potassium as well, although there be no suspicion of syphilis attaching to the history; and ultimately in very old cases, in broken-down subjects, nothing excels iron, strychnin, mineral acids, hypophosphites, and cod-liver oil judiciously alternated, unless it be a course of treatment at suitable hot springs.

A suppurating disorganized joint calls for the knife, drainage, or excision, as the case may be, along general surgical lines.

But be it remembered first, last, and always, that the urethral discharge must be controlled by local measures in order to obtain the best and quickest results, and the patient must not feel discouraged if his recovery is slow. It is the nature of the malady to be obstinate.

AFFECTIONS OF THE EYE DUE TO GONORRHEA

All gonorrheal affections of the eye are directly due to the gonococcus, the lighter varieties to metastatic infection, the virulent conjunctivitis only to direct contamination by gonorrheal pus.

The eye has been an excellent field for the study of the gonococcus, both clinically and laboratorially, and all investigators who have there sought the gonococcus intelligently have found it in the pus and in the tissues. It is a waste of time to cite the legion of authorities on this point. Sée[1] may be profitably consulted for all earlier bibliography up to his date. The clinical side has been amply established long ago by the inoculations made purposely in the effort to cure pannus.

The concomitance of arthritic infantile maladies with gonorrheal ophthalmia has been noted by Vignaudon (cited by Sée), who in a study of 20 cases of arthritis in children found that 10 had coincident vulvitis and 12 ophthalmia; and the very frequent concomitance of latent gonorrhea in the mother with ophthalmia neonatorum in the child has long since been established, notably since the researches by Kraus,[2] Zweifel,[3] and Kroner.[4]

But yet not every case of this last-named malady is of gonorrheal origin, as proved by the repeated instances in which the gonococcus is not found in the conjunctival pus of ophthalmia neonatorum. Yet even in the metastatic sero-vascular ophthalmia the gonococcus has been detected in the secretions, surely much attenuated in virulence or a specific conjunctivitis would have ensued.

[1] Le gonocoque, 1896.
[2] Centralb. f. prakt. Augenheilk., 1882, S. 134.
[3] Archiv f. Gyn., xxii, S. 318.
[4] *Ibid.*, xxv, S. 109.

This is established by the case of Morax,[1] in which the gonococcus was found in the secretions of both eyes, simultaneously involved in the course of a rheumatic attack. The conjunctiva had the peculiar injection of the rheumatic malady, not the vivid inflammation of virulent conjunctivitis. It is especially notable that a relapse occurred six weeks later, coinciding with renewed articular pains. In this second attack no gonococci could be detected in the ocular secretion.

There are two distinct forms of ocular trouble caused by gonorrhea. The first is rheumatic in character and nearly always, but not invariably, accompanied by other signs of gonorrheal rheumatism. It has no connection with local contagion, and affects the membrane of Descemet, the iris, or the conjunctiva.

The second form is conjunctivitis, depending always upon contagion. The distinction between these two affections should be kept constantly in view.

Rheumatic Gonorrheal Ophthalmia

To Abernethy, to Mackenzie, and particularly to Ricord, is due the credit of having first accurately described this affection. It is generally associated with the polyarticular variety of gonorrheal rheumatism. It may precede or follow the development of the disease elsewhere. Contagion will not produce it. Its essential cause is the urethral gonorrhea. According to Fournier it is 14 times more frequent than gonorrheal conjunctivitis. Knapp (personal communication) thinks this ratio inaccurate, believing that in their fright the virulent cases of conjunctivitis habitually seek relief from the oculist, and are not seen by the genito-urinary specialist. Cold, fatigue of the eye, etc., have no power to produce it. An individual idiosyncrasy seems to preside over its appearance. Should it occur with one urethral inflammation, the chances are that it will reappear with the next. It is far more common in the male than in the female. Sometimes it seems to exercise a revulsive action upon the joint trouble, and *vice versa*, the one disappearing to be replaced by the other, but this is exceptional. In brief, rheumatic gonorrheal ophthalmia is a localization of gonorrheal rheumatism upon the eye, the remainder of the body perhaps escaping.

Symptoms.—*Inflammation of the membrane of Descemet* (aquocapsulitis) is the most common form of attack. Here the conjunctiva is only moderately injected. The cornea is transparent. A cloudy, smoky appearance of the fluid of the anterior chamber is

[1] Thesis cited by Sée, p. 73.

the most characteristic objective symptom. Sight is slightly troubled, objects looking misty. There is no pain, but sometimes a sensation of uneasiness about the eye. Photophobia is absent or very mild. Sometimes there is a slight flocculent deposit on the posterior face of the cornea, with escape of a little blood into the aqueous humor (Cullerier). The iris is unaffected, perhaps a little slow in its movements. There is no deformity of the pupil, no change in colour of the iris, no other sign of iritis—points strongly insisted on by Cullerier.[1]

When the iris is attacked the symptoms do not differ from those of simple iritis: there are redness of the cornea, radiate pericorneal injection, contracted deformed pupil, sluggishness or abolition of the movements of the iris, change of colour, effusion of lymph into the pupil, plastic deposits in the anterior chamber, gelatinous or spongy iritis (Knapp), more abundant in gonorrheal than in ordinary iritis (Mackenzie), obscurity of vision, photophobia, lachrymation, and periorbital and ocular pains.

Fournier has described a rare *conjunctival form*. There is simple conjunctivitis, injection of the conjunctiva, uniform or marked at certain points, the secretion scanty and muco-purulent. Lachrymation is slight, the eyes are but little irritated. There is sometimes absolutely no pain, no photophobia, no alteration of vision, no symptom of iritis or of aquocapsulitis.

These varieties of ophthalmia, unlike the contagious conjunctivitis, are not often monocular; when so, the form is usually iritis. Both eyes are rarely attacked simultaneously. After one has recovered, inflammation may attack the other, run its course, and then return to the eye first involved. To get the disease the patient himself must have gonorrhea, whereas the conjunctivitis of contagion may be produced in any healthy individual by the mere contact of gonorrheal pus.

This malady runs a rapid course, declining with unusual speed. It may last several weeks or only a few days. Relapse is not infrequent. Of the three forms, conjunctivitis is the least harmful, aquocapsulitis is not grave, the iritis alone may leave trouble behind in the shape of adhesions, but even its (seemingly) fiercest form, spongy iritis, gets well, the exudate being absorbed from the centre towards the periphery, and leaving a sound eye (Knapp). This same spongy appearance occurs in the vitreous, but also clears up spontaneously (Knapp).

[1] Des affections blennorrhagiques. Leçons cliniques publiées par Eugène Royet, Paris, 1861, p. 165.

Treatment.—Treatment is mainly expectant. The eye must be kept at rest in all cases. The best local applications are emollient lotions of boric acid frequently used, with atropin, in case of iritis. Astringent collyria are useless, even harmful. Irritating pediluvia, the judicious use of revulsive cathartics, and a low diet constitute the general treatment. In iritis blood-letting by leeches is often of great value, as is sometimes moderate purgation. In mild cases patients do better if not confined to the house. They may even attend to business, if the eye be kept covered. When the symptoms run high housing is necessary. When in iritis the periorbital and frontal pains are severe recourse must be had to morphin, purgatives, atropin instillations, and to the salicylate of soda—from 2 to 4 grammes a day.

Virulent Gonorrheal Ophthalmia—Conjunctivitis

The sole and only cause of this terrible malady is contact of gonorrheal pus with the conjunctiva. It has no other relation to gonorrhea, and may affect the surgeon or the nurse as well as the patient, provided only a drop of contagious pus touch the conjunctiva. Hence the necessity of forewarning patients of the danger they run in neglecting the most scrupulous cleanliness of the hands after dressing the penis, using injections, or passing water. For the surgeon this precaution is equally necessary, together with the other one of burning all pieces of sponge, cotton, linen, lint, etc., that are brought into contact with gonorrheal pus whether derived from the urethra or from the eye. Neglect of this precaution may jeopardize some healthy eye.

Gonorrheal conjunctivitis fortunately is rare. Bumstead, who was an expert ophthalmologist as well as the best-known venereal specialist in New York in his day, found that out of 37,034 cases of disease of the eye treated at the New York Eye Infirmary, it occurred but 59 times, 1 in 628 cases. It is much more frequent in the male than in the female for obvious reasons. The right eye suffers oftener than the left, since most people are right-handed, and that more of both sexes do not become afflicted is due to the fact that dried pus loses its virulence. The gonococcus is not a very hardy parasite.

Symptoms.—The symptoms are those of purulent conjunctivitis intensified. The rapidity of their march is often appalling. The slight dry, sandy feeling attending the first congestion of the eye is of the shortest duration, as is the secretion of tears and of mucopus. Within a few hours after contagion the discharge is frankly purulent and the inflammatory symptoms go on, increasing rapidly in severity until, in three or four days, often sooner, destruction of

sight is threatened. Sometimes the safety of the eye is compromised in a few hours (ten to twelve). The vessels of the conjunctiva rapidly fill with blood, and its tissues become distended with serum (chemosis). The border of the infiltrated conjunctiva overlaps and partly conceals the cornea, the latter lying, as it were, at the bottom of a cup filled with pus. The eyelids have an erysipelatous redness and are very edematous and swollen. The upper overrides the lower. Pus is retained in large quantities. Pain, ocular and periorbital, is often intense. The cornea soon falls into ulceration if the chemosis continue. There is, first, a purulent infiltration between its lamellæ, then softening and ulceration, superficial to begin with, and usually situated near the circumference, perhaps obscured from casual inspection by the overhanging chemosed conjunctiva. This ulceration rapidly progresses to perforation, the aqueous humor escapes, and hernia of the iris usually occurs. The cornea may be pressed out into an anterior staphyloma, or be destroyed by the ulcerative process, or fall out whole, like a watch-glass, permitting the contents of the eye to escape. The general symptoms are moderate. Fever is usually mild, except in rare cases of suppuration of the globe, and soon gives place to a nervous, depressed, irritable condition, attended by insomnia, agitation, restlessness, more rarely by stupor.

Diagnosis.—The following table, prepared by Fournier, but slightly modified, sets forth the distinguishing characteristics of the two ocular affections found in a patient with a urethral discharge. These distinctions cannot be too strongly insisted upon on account of the liability to confusion of two conditions, one of which is so harmless and so little benefited by remedies, the other so destructive and so urgently in need of intelligent and careful treatment. The specific gonococcus always abounds in the pus of gonorrheal conjunctivitis, is usually absent or very difficult to find in rheumatic gonorrheal ophthalmia:

Virulent Gonorrheal Conjunctivitis	*Rheumatic Gonorrheal Ophthalmia*
1. Essential cause: Inoculation of the conjunctiva with gonorrheal pus.	1. Contagion plays no part in the production of the malady, which is developed under the influence of an internal cause the nature of which is unknown. (Now known to be metastatic.—Keyes.)
2. A rare affection.	2. An infrequent complication of gonorrhea, but still much more common than the contagious ophthalmia (14 : 1). (Knapp thinks that the specific form is undercredited.)

3. May affect subjects not suffering from gonorrhea.	3. Only attacks patients already suffering from gonorrhea.
4. Usually only one eye involved.	4. Commonly both eyes.
5. The symptoms are those of the gravest kind of purulent ophthalmia. They affect the conjunctiva primarily.	5. The symptoms are those of an inflammation of the membrane of Descemet, of an iritis, or of an oculo-palpebral conjunctivitis.
6. Symptoms fixed, not going from one eye to the other.	6. Sometimes the inflammatory phenomena are mobile, passing from one eye to the other.
7. No tendency to relapse in subsequent gonorrheas.	7. Frequent relapse in the course of subsequent gonorrheas.
8. No coincidence with rheumatic manifestations.	8. Coincidence with gonorrheal rheumatism very habitual, almost constant.
9. Prognosis excessively grave, often loss of the eye.	9. Prognosis without gravity.
10. The eye is saved only by a most energetic and careful treatment.	10. Expectation, or the simplest treatment sufficient for a cure.

Prognosis.—In severe virulent gonorrheal conjunctivitis the prognosis, under the best of conditions, is most grave. Unless treatment be started early and carried out faithfully the eye is lost, or at least its efficiency is impaired. A clouded cornea, anterior staphyloma, or trachoma may be left behind.

The real danger in gonorrheal virulent conjunctivitis is due to the dense episcleral or subconjunctival ridge of tissue which by strangulation tends to produce ulceration and sloughing of the cornea. This it is that produces chemosis—an edema of the superficial subconjunctival tissues. Scarifying the chemosis or even cutting through the tense ridge of episcleral tissue does not mend matters much. The aim of treatment is to prevent or to moderate the formation of this ridge by keeping down inflammation.

The prognosis also varies with the intensity of the case, which intensity is apparently regulated by the grade of virulence of the infecting pus.

That the gonococcus varies greatly in virulence is not to be doubted. When attenuated in the urethra by vigorous bactericidal treatment ophthalmic infection is certainly modified. Dr. Chetwood had recently a case in point under my observation. A patient gave himself double gonorrheal conjunctivitis while under most active permanganate-of-potash-irrigation treatment for a recent virulent gonorrhea. Dr. Knapp treated his eyes, finding the gonococcus in the secretion of both, and cured him in a couple of weeks with little else than ice compresses and protargol. The symptoms never ran high.

The prognosis in ophthalmia neonatorum of gonococcal origin is

very much better than in the adult malady, and the reason clearly is attenuation of the virus which exists in a mild form (latent gonorrhea) in the passages of the mother, for surely the tissues of the child lend themselves most freely to the suppurative process.

Treatment.—For the line of treatment here laid down I am indebted to my friend Dr. Knapp, whose authority on these matters few will contest, none will deny. He totally condemns the old-fashioned strong nitrate-of-silver treatment in the early stages of the malady, believing that this always does harm, and never aborts the disease, but by adding a new irritative element only kindles the flame and adds to the danger of producing the hard episcleral ring already alluded to. This new theory I accept most readily, as it accords with my own experience about the urethra. Formerly nitrate of silver was used in the urethra early in gonorrhea. I myself advocated and practised this abomination. I have now totally discarded it. The nitrate is a coagulating agent. It does not penetrate. It does irritate the surface traumatically, preparing the soil for invasion by the fresh seed from beneath—seed protected by the tissues from the germicidal effect of the nitrate.

The only instance in which it is perfectly proper to apply nitrate of silver early in this malady is immediately after known infection, before any redness is seen or any irritation felt, as, for instance, when a little pus from an infected eye is accidentally spattered and gets into the eye of the surgeon or the nurse. In such a contingency a 2% solution of the nitrate may be once freely instilled into the contaminated eye with fair hope of aborting the malady. Two per cent of the nitrate of silver does no harm to the normal eye, and if the gonococcus is still upon the surface and has not penetrated beneath the epithelium, it may be fairly hoped that one thorough application will destroy it. After three hours it is hopeless.

Cocain should never be used upon the eye in virulent conjunctivitis. Its own primary contractile action, its capacity to produce anemia locally, as a first action, cause a sucking in of all the tissue juices, and with this a deeper penetration of the gonococcus. It also weakens the nervous vital tone of the tissues and makes them more susceptible.[1] In making local examinations of and applications to the inflamed eye the utmost care and caution should be exercised lest the fingers or the retractors touch the cornea, thus detaching the

[1] Dr. R. H. Derby praises without reserve the constant free use of a 1% solution of holocain during the entire course of this malady, believing that while it possesses certain analgesic qualities it is free from the evils of cocain, and is at the same time antiseptic. Dr. R. O. Born thinks highly of ½% to 1% eserin ointment, or 1% pilocarpin, to relieve tension in impending or actual corneal ulcer.

soaked epithelium, and causing surface corneal excoriation. The pavement epithelium protects the deeper tissues and an excoriation lets in the microbes, changing it at once into a corneal ulcer.

In making manual and instrumental exploration this fact must be kept constantly in mind. The greatest danger in virulent gonorrheal ophthalmia is corneal ulcer with prolapse of the iris and its consequences. If this prolapse should occur, its removal with scissors or any cutting instrument is to be deprecated. The plug of iris is a sort of bar to deep microbic invasion. With its removal the door to the interior is opened, and panophthalmitis is imminent. Therefore it should be let alone until the patient gets well.

For the same reason, if the anterior chamber becomes tense and distended by fluid it should by no means be tapped, as formerly advised, because the puncture is an easy road for microbic invasion, a thing of all others to be dreaded.

If an eye is destroyed by gonorrheal or other purulent inflammation the danger of sympathetic inflammation of the opposite eye is very slight, if it ever occurs (Knapp). It is not therefore proper to remove the stump for fear of this dreaded complication, a fact well to bear in mind, because a shrivelled stump of an eye furnishes a better base of support for an artificial eye than does enucleation or its substitutes.

In treating virulent gonorrheal conjunctivitis not a moment is to be lost. Delay may jeopardize the eye. The essentials of treatment are three:

1. Antiphlogosis: Cold.
2. Cleanliness: Irrigation.
3. Antiseptics: Bactericides.

The greatest possible care is necessary in handling the tender swollen eye. No pressure is allowable. Two skilled nurses are essential—one for day and one for night work.

All dressings should be the lightest possible, and tenderly placed by a delicate hand. The swollen upper lid is already weight enough. The utmost care should be used in protecting the sound eye from contagion. Buller's shield, a watch-glass set into perforated squares of rubber plaster, is not so good as Knapp's suggestion, a mica spectacle plate (to be obtained from any optician) fastened on with rubber plaster strips. This is transparent, very light, and does not steam.

The moist absorbent cotton used for wiping the pus from the inflamed borders of the lids should be at once destroyed. Mild purgatives and a light diet are of advantage at first. Perfect rest of body, and, if possible, of mind, should be secured. The sick-room

should be obscurely lighted. If the patient is not robust no depleting measures are allowable, and the laxative, if any be given, must be light, while the diet must be supportive, even stimulating when the condition is low.

Under no circumstances is a mercurial course advisable or a continued depressing treatment harmless. Under all diet rules lies the general principle that the strength must be kept up, for there are on record cases of children who in the period of recovery acquired summer diarrhea, and at once suffered an aggravation of inflammation of the cornea which, by regulation of diet and arrest of diarrhea, immediately improved.

Local treatment is the same for all cases. Cold applications are of the utmost importance, but their application must be unremitting night and day, and for this reason two or even three trained nurses are necessary. Thin compresses should be kept laid out flat upon a cake of ice, and these should be placed upon the closed lid, being renewed about every five minutes night and day, and the applications continued as long as they feel grateful to the patient, yet not too long, and the cold must not be too intense, especially during the decreasing stage, as it may interfere with the nutrition of the cornea—an interference which manifests itself by a misty appearance commencing at the centre of the cornea. Should this be noticed, the cold applications must be stopped at once.

Cleanliness and drainage must be constantly assured by gently separating the lids and freely instilling with a dropper or an irrigator (not a syringe for fear of sputtering the pus into the eye of the attendant), either chlorin water, or 4% boric-acid solution, or weak permanganate-of-potash solution.[1] These applications are made freely to the entire conjunctival sac about every two hours—or even oftener if the pus be very abundant—and a solution of protargol (5% to 15%) is to be painted over the entire ocular and palpebral conjunctiva with a soft camel's-hair brush (everting the lids) three or four times a day.

These applications are continued as long as the irritative symptoms and the swelling of the conjunctiva continue to increase, probably one or two weeks. The pus meantime is getting thicker, and must be scrupulously removed from within the conjunctival sac by antiseptic irrigation and from without by the aid of moist absorbent cotton.

[1] Constant permanganate weak irrigation has been used, and much stronger applications of the same drug, at longer intervals, but the treatment has not found general favour or adoption in New York, strangely enough, since this remedy has earned for itself such a notable reputation in the urethra.

Cerate or vaselin should be smeared along the edges of the lids to facilitate the escape of the pus which the swollen lids tend to keep inside the conjunctival sac, though the constant irrigation meets this difficulty pretty well. Cantholysis—slitting the outer commissure to the bone—formerly much insisted upon, is much more rarely called for since the introduction of modern methods. It is very rarely, if ever, required.

This treatment is to be kept up unremittingly with irrigations every two or three hours until the symptoms begin to decline—one or two weeks—and then, as the swelling abates and the mucous membrane assumes a velvety appearance, the nitrate of silver in a 2% solution may be applied with a brush once a day, the other means being continued with diminishing intensity.

Chemosis is no longer treated by scarification. This does no real good, as it only removes the symptom (the edema) and not the cause (the episcleral indurated ridge). The best testimony as to its inefficiency is furnished by the fact that the numerous scarificators formerly in evidence have disappeared from the shops.

The indication furnished by chemosis is to persist in antiphlogosis—cold.

If the cornea becomes opaque, or even before this, atropin should be used, in order to prevent congestion and implication of the iris.

Preorbital pains are treated like those of rheumatic gonorrheal ophthalmia (p. 160).

Finally, in the last period, after the gonococci have disappeared and the stage of catarrhal conjunctivitis has arrived and all acute symptoms have subsided, then astringent collyria are in order, such as—

℞ Alum..... 0.5% to 1%
℞ Zinci sulph..... 0.5% to 1%

used with a dropper 2 or even 3 times a day—more or less often and more or less strong, according to the effect.

CHAPTER X

SPASMODIC AND CONGENITAL STRICTURE

An abnormal narrowness of any portion of the canal of the urethra constitutes stricture, or, since the urethra is naturally a closed canal, Sir Charles Bell's definition may be more accurate and loss of dilatability may be termed stricture. This contraction of the canal, according to the first definition, to constitute stricture must be unnatural, for the urethra has certain points of normal contraction—namely, the meatus, the middle of the pendulous, and the beginning of the membranous urethra, and these are not strictures. They became so, however, if unduly small. Thus, an individual with an average-sized penis and urethra, whose meatus will only take No. 10 French, has stricture (congenital) of the meatus, although he may never suffer any inconvenience therefrom. Again, any inflammatory condition of the walls of the canal, or spasmodic contraction of the same, constitutes stricture in a certain sense, as does also any growth upon or beneath the mucous membrane—cancerous, tubercular, syphilitic, or membranous. In the same way a collection of fluid outside the canal may constitute stricture—abscess, serous or hydatid cyst, etc.—anything, in short, which lessens the size of the canal when distended by the stream of urine, foreign bodies, of course, excepted. In all the last-named conditions, however, stricture is only an epiphenomenon, and not the disease itself.

True stricture is of two kinds: 1. Muscular or spasmodic. 2. Permanent or organic—the latter congenital or acquired. Inflammatory stricture does not exist as a disease of the urethra. Any inflammation will lessen the calibre of the canal, just in proportion to the turgescence of the mucous membrane; but this is unimportant. No amount of simple inflammation of the urethral mucous membrane constricts the canal enough to occasion serious inconvenience (retention), unless occurring in connection with organic stricture, assisted by muscular spasm or complicated by congestion. A croupous membrane may exist within the urethra, and more or less obstruct the flow of urine; but this is exceedingly uncommon. Roki