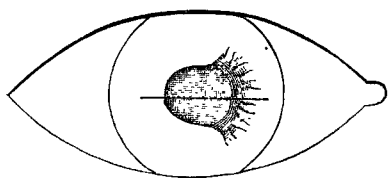


cally out of the question in cases of this description, and it is only after comparison of a long series of cases treated by both methods that anything like an authoritative opinion can be ventured. A vivid recollection of the frequency with which these cases went from bad to worse in my earlier years leaves no doubt in my mind of the immense superiority of the quinine treatment. I am far from saying that all cases of hypopion can be made to disperse by means of quinine; but I am constantly seeing cases in which, in my judgment, the process is quickly arrested, and which would otherwise inevitably require operative measures. Old cases where the pus has become mixed with fibrinous material will no doubt require evacuation, but I believe that even then the use of the quinine drop exerts a powerful influence in preventing the reaccumulation of the pus. Before leaving this part of the subject, I may say that patients make no unusual complaint of smarting in using the drops. An aqueous solution of the soluble quinine is innocuous, and can be used as frequently as necessary without the least detriment to the eye. Coming, then, to those cases where the evacuation of the pus by operation is imperatively demanded, the question arises, What is the best method of performing paracentesis? There are two methods in ordinary use: First, by making a horizontal incision, parallel with the margin of the cornea, just underneath the purulent collection; and secondly, Saemisch's incision, which consists in passing the knife into the anterior chamber at the spot where the ulcer may happen to be and dividing it through and through, as shown in Fig. 1, the

FIG. 1.

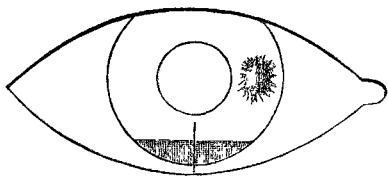


Saemisch's incision. After De Wecker.

blade entering the anterior chamber and emerging from it in healthy tissue.

To the first of these incisions I think there are serious objections. 1. The anterior chamber does not empty itself well, especially when the knife is slowly withdrawn, as is generally advised. 2. There is considerable danger of prolapse of the iris. 3. There is the maximum danger of interference with the nutrition of the cornea, because more of the nutritive channels, which are radially arranged, are involved in the incision. In fact, the only advantage this incision possesses, as far as I can see, is that it leaves no visible scar. Personally, I have entirely abandoned it for several years. Secondly, Saemisch's incision. I believe the good effect which undoubtedly follows this incision is due, not to the fact that the ulcer is cut through, but because the anterior chamber is more thoroughly emptied of the pus. On the contrary, any incision of an already attenuated and weakened part of the cornea must, it seems to me, be in itself injurious. I have not seen any reason advanced for dividing the ulcer itself as practised by Saemisch, and, unless it can be shown that this method possesses some curative influence other than is brought about by the thorough evacuation of the anterior chamber, I believe an incision in healthy tissue is decidedly to be preferred. Moreover, it is evident that if the ulcer should happen to be situated in the upper two-thirds of the cornea, the evacuation of the contents of the anterior

Fig. 2.



chamber must be a matter of some difficulty; and this is probably the reason why authors generally agree that the incision should be reopened daily for some time. It requires no great knowledge of the subject to see that this reopening of the chamber is a great drawback to the progress of the case. It prevents healing and greatly facilitates the forma-

tion of anterior synechiæ, not to speak of the pain and the annoyance it gives a patient already reduced and little able to bear them.

Basing my practice on these considerations, I now always make the incision as shown in Fig. 2. I introduce an ordinary Graefe's knife into the anterior chamber underneath the purulent collection, and carry it directly upwards in the direction of the pupil, care being taken not to enter the pupillary area. I withdraw the knife rather quickly with a forward motion, and the result is that the aqueous escapes with something of a rush, carrying with it the purulent mass which generally sticks between the edges of the incision, where it can be easily picked out with a pair of forceps. Any remaining fluid pus immediately follows, and the anterior chamber is left perfectly empty. I think this incision has distinct advantages over the others to which I have referred. 1. It is made at the seat of the purulent collection, and being in the line of pressure from behind, the evacuation is as complete as it can be. 2. Being made in the direction of the nutritive channels, it offers the minimum of interference with the nutrition of the part. 3. Prolapse of the iris is impossible, because the effect of pressure of the muscles upon the globe is to bring the edges of the incision together, and so effectually to prevent protrusion of the iris. 4. Being made entirely in healthy structure, it heals by first intention, and I never have occasion to reopen it. If, after practising this incision, the case goes from bad to worse, it is not because the anterior chamber requires to be reopened, but because of the continued spreading of the ulcer. I have no doubt, however, as already mentioned, that the use of the quinine drop after the operation has much to do with preventing the reformation of the hypopion. In the event of the ulcerative process continuing and threatening, as it sometimes does, the entire surface of the cornea, I consider the actual cautery the most effectual means at our command for arresting the spreading process. In conclusion, I think the only objection likely to be advanced against this incision is that it leaves a scar; but I consider this a purely theoretical objection. The incision need never encroach upon the pupil, hence no interference with vision need be apprehended, and the scar, being linear, is practically invisible against the background of the iris.

Liverpool.

SOME CASES OF RENAL COLIC.

By NESTOR TIRARD, M.D., F.R.C.P.,

SENIOR ASSISTANT PHYSICIAN, KING'S COLLEGE HOSPITAL; PHYSICIAN TO THE EVELINA HOSPITAL FOR SICK CHILDREN.

IN dealing with any case of severe abdominal pain, which recurs from time to time in a paroxysmal way, it is usual to make inquiries as to the precise starting point of the pain, and the directions in which it radiates, and to ascertain the occurrence of any accompanying symptoms which may throw light upon the diagnosis. The information thus gained will frequently form the foundation for further investigations, and thus the clinical features of the case may often be elucidated with ease. Thus a woman aged fifty, who was recently under my care at King's College Hospital, gave the following account of herself: Until three years ago she had had no serious illness, but at this time on several occasions she passed blood with her urine, and this hæmaturia was mostly accompanied, preceded, or followed by somewhat severe lumbar pain in the right side. After these attacks there was frequently more or less acute pain on micturition, which, however, gradually subsided. The association of hæmaturia clearly pointed to the renal origin of the colic, and, although the pain in these earlier attacks does not appear to have been as severe as usual in cases of renal colic due to calculus, there was no difficulty in arriving at a diagnosis, since the immediate cause of her appearance at the hospital was an attack of very severe pain, during which she was repeatedly sick, and on examination the urine was found to be highly charged with blood. Mostly the passage of the first renal calculus along the ureter is attended by more pain than in later attacks, since the ureter becomes more distended each time a calculus passes along it, and thus offers but little opposition to the passage of a small calculus. In this

case, however, there could be no doubt that a calculus of much larger size than usual was making its way down the ureter, or perhaps had already reached the bladder. All cases of acute abdominal pain do not disclose their etiology as readily. The common causes of true colic are hepatic, nephritic, and the form due to lead poisoning. Renal colic usually commences somewhat acutely in the region of the kidney and shoots downwards towards the groin, sometimes being associated with aching and tenderness of the testicle, or even with pain on the inner side of the thigh. Sometimes, however, it passes upwards from the original site, so that tenderness or actual pain is referred to the angle of the scapula or even to the shoulder-tip, and then it is most important to consider the associated symptoms to distinguish the case from one of hepatic colic, in which the pain, starting in the right hypochondrium, radiates backwards and upwards in the direction of the shoulder. A short time ago I saw such a case in consultation, where, in the absence of hæmaturia, the vagueness of the localisation of the pain and the indefinite way in which it radiated, left considerable doubt as to its nature, until the appearance of bile in the urine rendered it certain that we were dealing with hepatic colic. In cases of lead colic the pain appears to start at almost any point within the abdomen; but it is referred mainly to the region of the umbilicus, and is generally relieved by pressure. Although by thus endeavouring to trace the course of the pain a great deal may often be learnt, occasionally the indications are misleading. Thus a case I saw in consultation a few years ago baffled all concerned. It was in a school-boy aged twelve, in whom there was a history of hæmaturia, with severe pain, after another boy had jumped suddenly and roughly on his back. There was only this one attack of hæmaturia, but from this time there were frequent complaints of severe pain, which seemed to return with any sudden jolting movements, a railway journey or a ride in a hansom cab often proving sufficient exciting cause. It was also noted that the pain was worse with constipation or with acute diarrhoea. Digestion was imperfect and the urine contained numerous crystals of oxalate of lime. Although no certainty was felt about the presence of a renal calculus, it was generally thought that the symptoms might be due to this, and that an operation was advisable as affording the best prospect of relief. At the operation no stone could be found, although the pelvis and the substance of the kidney were carefully explored by a needle. A firm cicatrix was, however, discovered uniting the capsule of the kidney and the descending colon, and this was so tough and so extensive that it was deemed expedient not to divide it. This, then, furnished the explanation of the symptoms and the occurrence of pain after intestinal irregularity. The lad recovered, and is now able to keep fairly free from pain so long as he attends closely to the action of the bowels. As a parallel case I may mention another which has interested me greatly during the last two years. The patient, a young lady, first complained of increased frequency of micturition with pain, and the urine was found to be charged with pus. Considerable improvement followed the administration of alkalis, and later I continued to hear good accounts of her progress when she was treated by a surgeon with vesical injections of nitrate of silver. Eighteen months after the onset of cystitis she again came under my care for sudden severe pain in the lumbar region, far more intense than any pain she had previously suffered, and accompanied by sickness and by complete prostration. She has now had several of these attacks of renal colic, and the deeply interesting fact has been ascertained that for a short time immediately before one of these severe attacks the urine has usually been remarkably free from pus, but that shortly afterwards it is once more turbid and opaque. Clearly the explanation is that, although the case started with simple cystitis, the inflammation has extended to the pelvis of the kidneys, and that one ureter is occasionally blocked by a thick tenacious clot.

The pain in ordinary cases of renal colic has been variously attributed to direct irritation by the calculus, which is occasionally of a mulberry form, or to the over-distension of the ureter above the calculus. Neither of these explanations appears to me quite satisfactory. I believe that the cause may be gathered by reference to the other common forms of colic. The bile is secreted at such low pressure that hepatic colic can scarcely be due to over-

distension, while gall-stones are usually so smooth that, in spite of their facets and angularity when multiple, it would seem unlikely that direct irritation can result. In the case of lead colic there is no stone to cause either severe local irritation or over-distension, but the cause is usually sought in temporary paralysis of a portion of the intestine. In the three, however, there is one condition common to all—viz., severe spasm of involuntary muscle; and in spite of the occasional abrasions which have been found in the lining membrane of the ureters, I believe that this muscular spasm should be regarded as the immediate cause of the pain. This view is further supported by the analogy of the pain of ordinary flatulent colic, and by the pains and after pains of labour, when the uterine contractions become exaggerated. Renal colic is undoubtedly the result of any attempt of a calculus to pass down a ureter of insufficient calibre, and it does not seem that the pain has any relation to the shape of the calculus or to the amount of local abrasion, but that it depends mainly on the amount of involuntary spasm which is excited by the presence and the size of the calculus. This contention is further supported by the result of treatment. In these cases it is customary to employ opium or morphine, and further relief is frequently afforded by a hot bath. The first doubtless relieves pain by its general anodyne action upon the nervous system and by blunting the sensibility it renders the condition less unendurable. The action of opium, however, extends also to the relaxation of muscular spasm, and in this action it is aided greatly by the influence of heat. Further, the pain travels downwards along the length of the ureter, and it frequently ceases almost entirely after the stone has passed into the bladder, the acute, agonising pain being followed merely by a dull aching, which gradually passes off. This last pain is, I believe, the result of irritation, while the acute pain is produced by muscular spasm.

Weymouth-street, W.

PLEURAL EFFUSION AND EMPYEMA.¹

By JAS. ALEX. LINDSAY, M.A., M.D., M.R.C.P. LOND.,

PHYSICIAN TO THE BELFAST ROYAL HOSPITAL; CONSULTING PHYSICIAN, ULSTER HOSPITAL FOR WOMEN AND CHILDREN.

IT is with some hesitation that I undertake to direct the attention of the Ulster Medical Society to so familiar and well worn a subject as pleural effusion and empyema. I am encouraged to do so because the diseases in question, however familiar, possess a very exceptional clinical interest, and because there are many points in connexion, especially with their etiology and treatment, around which much controversy has raged, and still rages. I have a further reason for inviting attention to this topic—viz., that it is one which concerns and interests not only physicians but surgeons, and I rejoice that in the goodly array of speakers who are to follow me are to be found the names of several of my surgical colleagues. Permit me to say that I have given the subject special attention for several years, and that my opportunities for observation have been considerable. My remarks will be based mainly on a series of thirty-five cases, about which I possess full information. I have also partial records of a number of additional cases, bringing up the total to about fifty, and these partial records will be available for at least a portion of our inquiries. I can hardly hope that my facts will be new, but they will be at least facts, and not mere theories or book-work.

It will be obvious that to handle exhaustively so vast a subject as pleural effusion and empyema within the compass of a single paper would be altogether impossible. I shall therefore make no pretence of covering the entire ground, but shall select a number of points which seem to offer the best prospect of affording us something of interest and value. Without further preliminaries, therefore, I proceed to consider the first question which I have put down for discussion—viz., is simple pleural effusion commonly due to (a) exposure, (b) rheumatism, or (c) tubercle? In this country exposure has been usually regarded as a common and adequate cause of pleurisy. On the Continent, however, the tendency has been rather to regard the affection as due to some specific cause, either rheu-

¹ A paper read before the Ulster Medical Society.