Thomas Sinclair (1857–1940)

President of the Ulster Medical Society 1895–96

Presidential Opening Address
Ulster Medical Society
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Ladies and Gentlemen, The office of President of the Ulster Medical Society to which you have called me is an honourable and dignified one.

The Society, under slightly modified titles, has existed for nearly a century. It has numbered among its members and office-bearers many capable men, who have distinguished themselves in civil, naval, and military service; and in thus attaining distinction have reflected lustre upon our profession and Society. The traditions of such an institution derive accordingly a high value from their duration, and are such as to awaken in the members of to-day feelings of respect for the Society and reverence for their predecessors. To fill the presidential chair worthily, and to endeavour to emulate the achievements of those who have served this office, to the great advantage of the Society and their own abiding credit, is a task one undertakes with hesitation and diffidence.

I desire to express my acknowledgments, in the most cordial manner I am capable of, to the Council and members of the Society for the honour they have conferred upon me in electing me their President. If there is one consideration more than another from which I gather comfort at this stage it is the flattering unanimity that has marked the selection, and which I am wholly at a loss, after due self-examination, to explain.

It gives me the agreeable assurance that my short-comings in office will be scanned by those who are in sympathy with me and who will extend to me the indulgent criticism of warm friends. Nevertheless it will be my duty to do my utmost to promote the interests of the Society; and with the assistance of our esteemed Secretary (Dr. M'Kisack) I hope the ensuing session will not be barren in its results, or its records rank indifferently among the archives of the Society when its proceedings shall be no longer prospective but historical.

In one particular I am prepared to fail, and that is, in endeavouring to maintain the high level of geniality and kindliness in the conduct of the affairs of the Society, which has been reached by my respected friend and former colleague, Brigade-Surgeon M'Farland. I am painfully aware that the chilling influences of a Northern birth and education place me at a very great disadvantage in succeeding a President whose faculties and emotions have developed and luxuriated in the more benign environment of a warmer clime and a sunnier atmosphere; and who has drawn to himself during his year of office the highest regards of the members of this Society by his perennial good nature and urbanity, his high-minded discharge of duty, as well as by his scientific attainments.

Various topics suggested themselves to my mind as appropriate for a presidential address, but I have selected one of general medical and surgical interest, concerning a department of Surgery in which I have had some opportunities of practically informing myself in recent years.

May I ask your attention to a brief review of recent surgical developments in the treatment of disease in some of the abdominal organs, more particularly those of the chylo-poietic system. It appears to me this subject may be most usefully

presented from the standpoint of a boundary commission, entrusted with the task of delimiting the frontier between Medicine and Surgery in the abdomen. Far be it from me to suggest an antagonism between what must ever remain sister sciences; for it is quite in the opposite direction that my judgment tends. My object rather will be to show, that in failing in the self-imposed task of defining the boundary line, the indissoluble union and interdependence of the two branches may be amply demonstrated.

Ulcer of the stomach is a fairly common affection, which hitherto has been treated by medical means alone. Recently, however, it has been the object of surgical aggression, and it may be interesting to ascertain with what success.

Ulcers of the stomach have been excised and the defect in the organ sutured. These operations have been performed upon the Continent for the most part. Observe the remarks apply to ulcer before perforation. About thirty-eight cases have been reported with eight deaths, and this moderate mortality is held by the operators to justify the operative plan.

It was found in some cases impracticable to excise the ulcer safely, on account of its large size; in others the greater difficulty of inaccessibility of position had to be contended with; in some the edges left after excision did not bear stitching well, and leakage with peritonitis followed, more especially if vomiting supervened.

In examining the evidence in favour of a transfer of gastric ulcer before perforation, from the physicians to the surgeons, it will be well to recall the statistics used by Mr. Pearce Gould at the 1894 meeting of the British Medical Association, and by Mr. Greig Smith, Dr. Dreschfeld, and others.

The favourite seat of ulcer is on the posterior wall, not far from the pylorus and lesser curvature. Posterior ulcers perforate in only 2 per cent. of the cases. This consideration is not favourable to the operative plan. On the other hand ulcers on the anterior surface perforate in no less than 85 per cent. of the cases. This is very favourable to the operative plan. Now, if physicians could guide us in discriminating between those that are posterior and those that are anterior, and therefore accessible and liable to perforate, surgery might achieve distinction in the treatment of gastric ulcer; but we know of no certain sign that will guide to the situation, size, number or shape of these ulcers so that an operation in its earlier steps is exploratory and experimental.

The one satisfactory sign is haematemesis, but this when profuse suggests a situation near the curvatures where the large vessels lie. But ulcers near the curvatures are not very prone to perforate, so that this satisfactory sign while supporting the diagnosis of ulcer, in purely gastric affections of the non- malignant type, points away from surgical interference.

The surgical canon of cutting down upon a bleeding point and tying it scarcely holds here, for the haemorrhage will have probably ceased before arrangements could be made for an operation, and the parts in the stomach concerned in the haemorrhage, when exposed, might be found incapable of treatment directed merely to the bleeding. It is very discouraging to learn that perforation usually occurs in cases wherein the symptoms have been trifling and vague. These are just the cases in which a physician would have difficulty in making up his own mind as to the existence of an ulcer, and still greater difficulty in making up his patient's mind as to the necessity or propriety of an operation. Moreover, every perforation is not fatal; a salutary local peritonitis may save in a few instances. For the following reasons therefore I think the treatment of gastric ulcer should still be left to the physicians:–

1st. That the commonest site is on the posterior surface, a part not easily accessible for operation, and moreover not strongly indicative of operation by reason of a perforative expectancy so low as 2 per cent.

2nd. The possibility of the ulcers being multiple or of very large superficial area, suggesting that the excision of one might fail to cure, or the severity of the excision be such as not to justify the proceeding.

3rd. The consideration that profuse haematemesis points to a site not strongly indicative of operation, for the fear of perforation occurring in ulcers near the curves is not great, while the treatment of the haemorrhage itself by surgical methods is likely to prove belated or impracticable.

4th. The reflection that by no sign or symptom can the site, size, or number of ulcers be approximately determined. Even the very existence of ulcer may be questioned in instances verging on perforation.

5th. The results of medical treatment are superior to surgical for so far, the mortality being 15 per cent. for medical treatment, and 21 per cent. for the surgical.

It seems accordingly not unreasonable to sum up that surgeons are warranted in declining to operate by prophylactic excision or suture, until the physicians have perfected their diagnostic methods,

and are able to point out the cases in which perforation is imminent, viz. those on the anterior wall with a perforative expectancy as high as 85 per cent.

The treatment of *perforation of a gastric ulcer* stands on quite a different footing, for the reason that it is so frequently fatal; probably 95 per cent. of the perforation cases die.

To open the abdomen, and if accessible, to stitch up the perforation, with or without waiting to excise the ulcer, and then to thoroughly flush out the abdomen, is a course justified by the high mortality of the Fabian policy, as well as by the fact that some successes have already been reported, following the prompt adoption of this plan.

It may be remembered that, of the 15 per cent. mortality of gastric ulcer, perforation is responsible for less than half of the deaths, viz. in 6.5 per cent. Only a very few of the perforation cases spontaneously recover by a local salutary adhesive peritonitis.

A point strongly in favour of operating is the high degree of probability that the ulcer will be found on the anterior surface especially in young girls, as these anterior ulcerations perforate in quite 85 per cent. Hence the probability of being able to find and to deal effectually with the perforation, provided the patient be not in a condition of hopeless collapse. Under these relatively favourable conditions the treatment of gastric ulcer perforations is surgical.

To take up another affection of the stomach hitherto under the management of the physicians – *Chronic dilatation.* It is now generally understood that this is the result of a mechanical impediment to the out-flow of the contents of the organ, possibly the cicatrization of a pyloric ulcer, malignant stenosis, or adhesions between the stomach and the diaphragm or liver. Such cases are usually treated by diet, lavage, and various tonic and antifermentative drugs with temporary but not permanent benefit. The condition here alluded to being mechanical, the sooner the treatment is placed in surgical hands the better, save perhaps in those examples due to malignant disease.

Great good, it appears, follows the separation of adhesions with neighbouring parts, and the opening out of flexions or kinks in the organ that interfere with stomach movements. Where the obstruction is a pyloric cicatrix the organ must be opened and either a plastic or a radical operation performed upon the affected portion, pyloroplasty, or pylorectomy; or a lateral anastomosis made between the stomach and jejunum, gastro-enterostomy. In my hands gastro-enterostomy has given better results than pyloroplasty.

These operations are often objected to on the ground that re-contraction may take place, and on theoretical grounds I was for some time myself rather sceptical as to the permanence of lateral anastomosis openings. I had an opportunity of testing this in a case of gastro-enterostomy more than two years ago, effected with the aid of Senn's decalcified bone plates, and I am able to report, after twenty-six months, that the stomach functions are fully executed upon a varied solid dietary, and the dilatation of the stomach which had been so marked that the greater curvature lay near the brim of the false pelvis has disappeared; in short, there is no evidence of embarrassing contraction of the new orifice up to this date. The dilatation, as already hinted, gets well of itself when the obstruction is removed, and it is not necessary or desirable to diminish the peptic units in the stomach by excising a large oval portion from its walls. The transfer from the physicians to the surgeons of such cases before the effects of starvation have become too pronounced is probably now accepted widely but what are we to say of *Cancerous stenosis* ? The expectations awakened by Billroth's bold excisions of the pylorus for cancer, which I had the opportunity of witnessing, have not been quite realised; and the surgeons of to-day show great hesitation in relieving the physicians of the responsibility of treating these depressing cases. Considering the proneness to early recurrence even after successfully conducted pylorectomies, a proneness more pronounced in Scirrhus than in columnar epitheliomata of the colon and rectum, I cannot but think that extirpation of stomach cancer is an operation that surgeons should hardly recommend, and only undertake upon the express desire of a patient to have the operation done, after the tremendous risks have been explained to him.

My personal experience of pylorectomy for cancer of the pylorus amounts to one case – a rapidly growing tumour in a man of forty, who was determined to have the operation performed when the hopeless nature of the affection was explained to him. I followed Billroth's method throughout in a very laborious operation, but had the misfortune to lose my patient on the third day from pneumonia. No abdominal complications arose, from which I inferred that the suturing remained secure, and this represented the only consolatory reflection left to me after the exertion. In my judgment, if the physicians do not brightly shine in the management of gastric cancer the surgeons are not likely to eclipse them, if the test applied be not the recovery from the

immediate effects of a radical operation, but rather the prolongation of the life of the individual afflicted.

Passing to the vexed question of *intestinal obstruction* I may first remark, that we are not much farther forward in symptomatology than we were some years ago. Our friends, the pathologists, have given us but little help in this department, and we are still dependent upon clinical observation for criteria that would enable us to decide whether a patient in acute obstruction should be treated medically or surgically.

Surgeons complain that their services are enlisted in states of extreme exhaustion, when medical measures, too long pressed, have proved ineffectual; while physicians with equal right complain of the gloomy record of surgery in these desperate cases; even when an operation has been carried out at an early stage, and the reproach above adverted to has no foundation.

An abdomen, the seat of obstruction, is a sort of clinical Afghanistan, very resentful of exploration, and very intolerant of the intrusion of a foreign hand. Like the Afghans, the intestines oppose their sulky passivity to any efforts to induce them to act that may be made from the outside or the inside; and if by any chance they relax, when strongly pressed on certain occasions, it is only to run to wild excesses in a turbulent frenzy. They appear to be aware that they constitute still a buffer-state between medicine and surgery, on the frontier of which the physicians hold on with dogged English perseverance, while the surgeons, with ill-restrained Russian ferocity, hover around the opposite margin with a desire to invade, but with a disinclination to accept the responsibilities attaching to annexation.

Our chief difficulty as clinicians arises in those cases attended with fever, wherein the inflammatory nature of the obstruction is highly probable. We have, I imagine, decided that a sudden seizure without feverishness, with severe paroxysmal pain, early vomiting, visible peristalsis, and without tenderness in an undistended abdomen is surgical from the outset, calling for the early or immediate application of surgical methods either manipulative or sectional. Here the obstruction is purely mechanical, and we have to deal with volvulus, internal hernia, in its several forms, intussusception, or foreign bodies; and the surgical indications are clear. But it is otherwise when these cases are temporized with till peritonitis supervenes. As far as I have seen in operations conducted upon patients with this complication pronounced, I mean peritonitis, the results have been uniformly unsatisfactory; and it appears to me that in such situations the physicians should be asked to continue responsible for the treatment when the inflammation of the peritoneum has become generalized, though the end be unfavourable.

But to return to those that are attended with fever and are possibly inflammatory from the beginning. Careful records of early temperatures should be kept in such instances, for though the actual height of the fever is not a reliable guide in abdominal inflammations, the time of the onset of feverishness is of much importance in differential diagnosis.

Every one is familiar with the appearance of the abdomen in acute general peritonitis; smooth, white, and barrel-like, no intestinal coils or peristalsis to be seen or felt, but a gradual increase of distension of the paralysed bowels with complete cessation of their function. In many of these cases no fluid effusion can be demonstrated, in others there may be plenty, but so long as this is not purulent I feel certain that these cases are best left to the physicians. In their hands a considerable number of these anxious cases will recover, but in the hands of surgeons and treated by coeliotomy I am sure *none* will survive; for, on opening the abdomen a surgeon is tempted to handle the entire gut in the search for an obstructing cause. He finds everywhere soft gelatinous adhesions, no coil more obstructed than another; and finishes an unsatisfactory operation by an indifferent closure of the cavity, the patient sinking from shock in a few hours. With purulent peritonitis there is of course no reliance to be placed upon medical treatment. The early incision, lavage, and drainage of the abdomen by surgical intervention affords the only chance of saving one in a thousand of these unpromising cases.

While admitting the frequency of simple peritonitis being often due to exposure like pleurisy, I am not a convert to the modern doctrine that simple peritonitis is always a primary affection.

This view has originated mainly from the observation in postmortem examinations that signs of local enteritis are rare in fatal cases of peritonitis. There is a type of case ending in total obstruction which may last for a week or two, to which I wish to draw attention, that I am persuaded originates as an enteritis. It sets in with severe colicky pains, vomiting, and diarrhoea of almost choleraic intensity. The diarrhoea is suddenly succeeded by total constipation and distension, but the intestinal coils are easily seen and peristalsis is not wholly in abeyance. There is but moderate tenderness, though one part is more tender than elsewhere, and the temperature and pulse are high, with a raw-red clean dry tongue and much

thirst. I am satisfied that the peritonitis is here secondary to enteritis, and the failure to find postmortem evidences of the enteritis may be susceptible of this explanation, that these cases do not reach the postmortem table, but recover under medical treatment. I believe surgical interference is never required in these, and if applied would be disastrous. After a few days of sedative treatment and starvation during the rise of the fever, with a substitution of small doses of calomel and enemeta as it declines, such sufferers may in most instances be relieved.

Turning now to the operative treatment of *perforating typhoid ulcers*, we must all sympathise in Morton's demand that a mortality of 100 per cent. ought to be reduced. If this can be accomplished by operative measures we should be glad to learn of it. The original proposal of Wilson, of Philadelphia, has been carried into effect in about six cases, and only one success has been reported by Mickulicz. The diagnosis in Mickulicz's case is questioned on all hands, leaving us for so far with no encouragement to persevere in this direction.

The only excuse for seriously considering such a step as coeliotomy for typhoid perforation lies in this, that perforation occurs occasionally during convalescence, when a patient may be supposed to have recovered some strength to bear a severe operation; and further, that perforation occurs frequently in relatively mild eases, with moderate debility. It is only in such instances that physicians and surgeons alike would contemplate operation.

To operate late in the third week of typhoid is merely to accelerate death. But even in the two favourable groups alluded to, a consideration of the technique involved should make us hesitate to try the operation – that is to say, the perforation may be anywhere between the duodenum and the sigmoid, and there may be several perforations. Now, this involves the handling of the entire intestinal tract, a manipulation attended with great shock even in a vigorous patient. Add to that, the condition of the ulcer when discovered may be such from its infiltration and excavation as to compel one to excise a segment of the gut, instead of infolding it, and it will be seen how extremely unpromising the outlook is for a patient subjected in a debilitated state to either or both of these severe proceedings.

My own operative experience in this field concerned a case of perforation of a typhoid ulcer of the descending colon, resulting in the formation of a large haemorrhagic clot, with abscess in the left loin. This occurred during a severe relapse continued into the seventh week in a case of undoubted typhoid; and the clinical picture was that of profound anaemia, high fever with rigors, sweating, and great emaciation. I operated under the guidance and superintendence of the late Dr Smith, and opened up a cavity around the descending colon and left kidney, containing a large quantity of blood clot and pus. It was impossible to find in such a field either the bleeding point or the perforation, and I had to content myself with packing the cavity and rapidly completing the operation. The patient sank in about six hours from exhaustion, without further haemorrhage. It is not from the memory of this result, but from a critical examination of the technique involved in coeliotomy for typhoid perforation, that I cannot join in the sanguine opinion of some abdominal surgeons that there is a future before this operation, but certainly think that this complication should be left entirely to the physicians, as heretofore, to make what they can of the 100 per cent. mortality.

Appendicitis. – To understand the modern teaching about appendicitis we must set aside the terms typhlitis, perityphlitis and paratyphlitis as denoting separate forms of disease. We must regard these as stages in a single affection. That form of typhlitis known as typhlitis stercoralis may be allowed to remain, for, as its name applies, it is the irritation of the caecal mucous membrane by retained scybalae, and as to the propriety of its treatment by enemata and aperients remaining in the hands of the physicians there cannot be two opinions. Of appendicitis proper we have *endo-appendicitis* when the mucous lining of the appendix is the seat of catarrh; *parietal appendicitis* when the inflammation extends to the deeper coats; *peri-appendicitis* when the peritoneal covering of the appendix and adjacent parts is inflamed; *para-appendicitis* when by perforation or gangrene an infective inflammatory process is set up in the retro-caecal cellular tissue. These pathological interpretations we owe to the researches of the American Surgeons, who have taken up this subject with great spirit and pertinacity and have made it peculiarily their own. The light thrown by them upon the pathology and treatment of appendicitis is one of the glories of American Surgery, and we cannot be surprised if their national enthusiasm and confidence have led them to make more sweeping demands in favour of surgeons than the facts altogether warrant. For example, a highly accomplished friend and former fellow-student in Vienna, now practising in Philadelphia, reports 130 appendicectomies to his own hand; and in a paper he

was kind enough to send me he apologises for the delay in operating upon a case as it was the *third* appendicectomy in the one day. This appears a wholesale extirpation and astonishes us in the old country, where the advice of the American Surgeons for operative interference receives a tardy recognition. The American opinion seems to be, that if in twelve to twenty-four hours after the onset, a case of appendicitis does not show, with aperient treatment, unmistakable signs of improvement, the patient should be handed over to a surgeon. An extirpation should be immediately carried out, as delay, in their estimation, is more dangerous than waiting should the signs persist or become aggravated.

Could we unreservedly adopt this time limit as an invariable rule, we should regard appendicitis as surgical from the beginning. I imagine that our adoption of it would lead us to operate on many cases unnecessarily. On the other hand, I am convinced we do not operate often enough or early enough in this country. When we recall the fact that quite 70 per cent. recover under medical treatment physicians may well resent this surgical usurpation.

What is wanted is, that the physician should know just when to call in the surgeon; but that is not easily determined in first attacks. In discussing this question we are obliged to differentiate types of appendicitis and their characteristic signs.

1st. *Fulminating appendicitis*, distinguished for its rapidly fatal development; indicated by a retracted and universally rigid abdomen. Here prompt intervention can hardly save. Richardson having operated within six hours and found himself already several hours too late.

2nd. *Recurrent appendicitis*, in which the attacks are separated by long intervals, during which the patient is quite free of pain, tenderness, or other local discomfort. Here the tendency is rather towards obliteration of the tube than towards suppuration and perforation; and the indications for operation are about the same as in frequently recurring gall-stone colic. That is, the patient may decide to have an inconvenient tendency abolished by the extirpation of the organ, rather than wait for years for the solidification of it by appendicitis obliterans.

3rd. *Relapsing appendicitis.* – This must be carefully distinguished from the recurrent form. The recurrent may be compared to malarial attacks, the relapsing to a relapse in typhoid fever.

The relapsing form is characterised by pain and tenderness persisting during the very short intervals between the attacks. Here the likelihood of sero-purulent retention with risk of perforation is great, and an appendicectomy should be strongly urged in one of the quiet intervals. My own operative experience in these cases has confirmed the belief that this is one of the safest and most successful of the abdominal operations.

4th. *Appendicitis ending in obvious abscess*, either para- appendicular or peri-appendicular abscess. There can of course be no question about the surgical character of these cases. Free incision is called for to prevent diffusion. If the appendix can be seen it may be dealt with, but usually it cannot be isolated. I have operated on three such cases without formal extirpation, and the results have been satisfactory. As illustrating the effect of delay, I may say that I have also been called upon to open the abdomen in a fourth patient, in whom four large intra-peritoneal abscesses had formed by bursting, with general septic peritonitis, but failed to save him at so late a stage. I would also observe in this connection that rigors and sweating with emaciation have, contrary to expectation, in exceptional cases in my practice *not* indicated abscess formation, for, in one or two instances that recovered after one attack, I have seen these symptoms marked and yet no abscess formed, nor did escape of pus through the mucous canals prove the presence of suppuration.

5th. The ordinary first attack of appendicitis of moderate force is the example for which it is hardest to legislate.

An investigation of the average symptoms leads to the conclusion that the deciding symptom for surgical or medical treatment is the *tenderness*. All the other symptoms are fallacious guides. The pulse and temperature are misleading, although a high temperature is less alarming than a subnormal one, the onset of general peritonitis being commonly heralded by a fall.

The vomiting in appendicitis should cease when the contents of the stomach and duodenum have been rejected. Persistent, and especially projectile vomiting denotes obstruction, while the bubbling over of fluids that well up in the throat is suggestive of septic peritonitis.

The action of the bowels cannot be depended on as a guide. Constipation is the rule. Freely moving bowels, however, give us a sense of security in a subsiding case, and should prevent us operating.

Pain is misleading, as it is first experienced in the epigastrium, and only later comes to be referred to the caecal region. Tenderness is, after all, the deciding symptom, When the pressure of a finger tip at McBurney's point is made, and shows the maximum

tenderness, it is almost pathognomonic of the disease. Its increase, its persistence are important danger signals, and point to operation, as they denote abscess formation.

Finally upon this subject let me ask the question – When should surgeons decline to operate in appendicitis, and leave the case entirely to medical supervision? When the clinical picture is that of a distended abdomen, embarrassed breathing, bubbling over of intestinal fluids, complete constipation, absolute silence on ausculting over the bowels, small rapid pulse, and a hippocratic face.

It may be of some service if I supply a brief analysis of thirty cases of appendicitis, in the management of which I have been personally concerned, Upon a critical examination of the clinical details of these, I have been led to base my own opinions, while gratefully acknowledging the great help afforded to me in the interpretation of phenomena by the written and spoken opinions of others. The thirty cases are a fairly representative series, and show a general mortality of 3 – that is, 10 per cent. : –

1. Ordinary first attack cases, 14–with 13 recoveries and 1 death.
2. Abscess cases, 5–(*a*) 2 single abscess, all operated, with 2 recoveries and 1 death (*b*) 1 multiple abscesses, operated, with 1 death (*c*) 2 single abscess, spontaneously evacuated through the bowel, apparently going on to recovery.
3. Recurrent cases, 7–(*a*) 4, not operated, no deaths (*b*) 3, treated by appendicectomy, no deaths.
4. Relapsing cases, 3–all treated by appendicectomy, no deaths.
5. Fulminating cases. 1–operation, death.

Gall Stones. – In approaching this subject I would first assert that physicians do not diagnose cholelithiasis, or surgeons do not operate for its relief as frequently as they should. We should bear in mind that quite 10 per cent. of the bodies subjected to postmortem examinations show calculi in the gall-bladder. Doubtless some of the patients never suffered from biliary colic in its severer forms during life, but there can be little doubt that what is often blamed upon a bilious attack; the vagaries of an innocent kidney, or attacks of acute indigestion or colic, is really at bottom due to the irritation of gall stones and the local peritonitis associated with it. We must not forget also that after years of suffering patients may cease to suffer from gall stones, and hence some hesitation is induced in urging offhand operative removal. Dependence is mainly placed upon diet, exercise, plenty of fluid, and the use of alkalies and salines in the preventive treatment. I shall not trespass farther upon the domain of the physicians than to remark, that my experience of a considerable number of these cases treated medically had convinced me that the olive oil treatment, the turpentine treatment, and the ether treatment could not be depended on; and I am glad to see similar observations expressed by Professor Mayo Robson in his recent work. Mr. Robson does not allude to a medical measure in which I have much confidence – viz., a ten grain dose of calomel, having seen in several instances a perfect avalanche of gall stones expelled by its use. To be sure the patient will cherish a vivid recollection of the action of that dose; but, if recovery ensue from the intense suffering and occasional jaundice associated with biliary calculi, the patient may not feel disposed to quarrel with the torpedo-like tactics of the calomel.

A large number of sufferers must remain under medical treatment and properly so – viz., those in whom the attacks are infrequent, and who are not prevented to any great extent from following their employment.

2nd. Those who have passed at intervals numerous small calculi with very moderate pain, encouraging the belief that all are small and capable of evacuation through the ducts.

3rd. Those who have been intemperate and possess a large flabby fat deposit in the abdomen and its walls, in whom the risks of operation are considerably magnified.

4th. Those with signs of organic disease of the liver other than temporary congestive enlargements at the times of the colicky seizures.

5th. Those with persistent and increasing jaundice associated with a distended gall bladder and comparatively slight pain and tenderness. These are almost always malignant.

I performed cholecystotomy upon a young man some time ago, whose case supports this view. A tuberous mass the size of a potato occupied the head of the pancreas and blocked the bile duct, and two white nodules in the liver were judged to be secondary deposits. The extirpation seemed impracticable, and I merely established a biliary fistula in the usual way. The jaundice disappeared in a few weeks and the patient is alive six months after operation, but later stages of his malady bear out the malignant theory of its nature. His case illustrates the enormous risk of operations performed upon deeply jaundiced persons; the anaesthetic was very badly

borne, and the difficulty of dealing with the parenchymatous haemorrhage was considerable and time-consuming. The list I have just supplied comprises those cases which remain appropriately under the care of the physicians, and it now remains to point out the class of patients suffering from cholelithiasis before whom the advantages of operative treatment should be placed. The technique of cholecystotomy is now better understood. We have learnt that bile, without septic admixture, is not so noxious to the peritoneum as was formerly thought. It may, with certain precautions as to drainage or tamponade, be permitted to flow into the peritoneal pouch around the gall bladder, in those instances wherein a satisfactory suture cannot be placed. We have been made acquainted with the method of infolding the parietal peritoneum so as to touch and lie in easy contact with a contracted bladder; and further, with the adaptability of the omentum in the formation of a spout or floor. That no two cases of cholecystotomy are unlike is as true a statement as that no two cases of ovariotomy are alike. Thus in two other examples of this operation in my own practice the contrast was remarkable – the operation being simple and rapid in one with an enlarged gall-bladder; and exceedingly tedious and difficult in another, wherein fourteen stones were lodged in a contracted and puckered gall-bladder withdrawn fully one and a quarter inches under cover of the liver edge. It took a long time to find this bladder, and after all the disentanglement I could effect of adhesions to the duodenum, liver and great omentum no satisfactory approximation to the parietes could be brought about without immense sutural strain. The propriety of laying the advantages of cholelithotomy before sufferers from gall stones and urging a favourable consideration upon them of the operative plan appears justified in the following classes: –

1st. Those who are steadily losing flesh and strength from the effects of them.

2nd. Those who have very frequently attacks, and are incapacitated from attending to their business or profession to their own pecuniary loss.

3rd. Those who show recurrence of attacks, without ever voiding a gall stone, giving thus ground for the suspicion that the stones are large and incapable of passing through the ducts without great effort and risk of rupture.

In these classes much misery might be saved by an early transfer of them from the physicians to the surgeons. My own operative experience, comprising several cases, for so far without any fatality, enables me to confirm from personal observation most of the indications I have endeavoured to define and emphasise. Even after the expulsion of the last gall stone, symptoms may continue of the same kind though no gall stones are voided through the bowel or felt through the parietes.

Now these cases are eminently suited for operative treatment, the disentanglement of adhesions between the gall bladder and neighbouring organs may have as happy effects as the evacuation of stones themselves. On this account, therefore, an operation must not be deemed a failure which, planned as a cholelithotomy, ends merely in the separation of tough adhesions consequent upon the irritation caused by stones which have long before passed away.

A word will suffice to dismiss the subject *malignant disease of the gall-bladder*, which remains as formerly in the hands of the physicians.

Surgeons have tried their hand repeatedly in cholecystectomy to deal with this condition, but with very little to show for their exertions; so that we shall not be far wrong in assuming that extirpation of the gall-bladder for cancer is a discredited operation.

It may be of interest to notice in passing that primary malignant disease of the liver has been subjected to operation; a portion of the left lobe of a cancerous liver having been excised. The result was unhappy, and surgeons have no encouragement as yet in claiming a share in the management of this affection. In fact we may compare their bold attempts in this direction with their attempts in splenic surgery, when they proposed to treat splenic leucocythaemia by the extirpation of the enlarged spleen.

It would be beside my present purpose to dilate upon hepatic and splenic troubles amenable to surgical treatment, as I merely intend to instance in this paper diseases which lend themselves to medico-chirurgical contention.

And now, ladies and gentlemen, it behoves me to remember that there is a limit to human endurance. I must, therefore, apologise for straining your indulgence to the extent I have done. Permit me, in conclusion, to express my sincere thanks for the very patient hearing you have accorded me. If in any particular the opinions I have expressed or quoted should be obscure or unintelligible, I may be able to avail myself of some future opportunity of discussing some of the topics in detail, that I have lightly touched on this evening, with happily greater fulness and lucidity.