Degeneration Followed by Infection.

It is to be expected that a fibroid which has undergone degenerative changes would readily become infected, and this is a danger to keep in mind; but in this series I have only one patient who had a rise of temperature before operation. In this instance the fibroid had undergone red degeneration—a type which readily becomes infected. Probably the small incidence of this complication is due to the degeneration producing other symptoms which called for operation before the tumour had time to become infected.

Absorption from Degenerated Fibroids.

This is a very common occurrence. In this series I have three patients who were operated upon for this cause alone, though no doubt many of the other patients were suffering from absorption in addition to the more urgent symptoms which called for operation. Each of these patients suffered in general health—loss of appetite and loss of weight, and they were anaemic. All had degenerating fibroids and improved in general health after removal of these tumours.

Ascites due to Calcareous Degeneration.

This is a condition I have met with occasionally, and though it does not occur in this series should be mentioned. Occasionally in a patient with ascites there can be felt a hard tumour of pelvic origin, which is diagnosed as a malignant ovarian tumour, but proves to be a subperitoneal uterine fibroid which has undergone calcareous degeneration, and by its hardness has so irritated the peritoneum as to produce ascites.

Tenderness after Radium.

A patient, aged 52, had been treated by radium two and a half years previously for haemorrhage due to uterine fibroids. Since this treatment she had complete amenorrhoea, but complained of severe pain in three abdominal scars due to radium burns, and great tenderness in the uterus, which produced severe dyspareunia. The uterine fibroid was quite small and I did not advise any operation; but I think the case should be mentioned to illustrate the fact that treatment by radium, so strongly advocated by some authorities, is not entirely devoid of risk.

This is my experience of post-menopausal trouble from uterine fibroids during the last six and a half years—on the average ten cases each year sufficiently severe to require operative intervention. The number may not seem very large, but when we consider the increased risk of the operation in patients of advanced age, with resistance still further reduced by changes in these tumours, I do feel that this should have considerable weight with us when deciding whether a patient with a fibroid uterus before the menopause should be advised to have it removed. I give it as my considered opinion that it is much safer for a woman with a fibroid of moderate or large size (quite apart from any symptoms it may be producing at the time) to have it removed before the menopause than to run the risk of malignant or degenerative changes, which so frequently occur after the menopause.

DISCUSSION.

Dr. BETHEL SOLOMONS (Dublin) was struck by the large percentage of malignant changes in Professor Shaw's series, which seemed to show that those who favoured the treatment of fibroids by x rays were acting on the wrong lines. Whereas in many cases after the menopause hysterectomy was no doubt the best operation, he thought that in isolated instances myomectomy might be preferable. He warmly advocated the use of stovaine in these cases.

Professor LOUISE McILROY (London) agreed with what had been said; she was convinced that fibroids were caused by toxæmia. She related the case of a submucous fibroid in an enfeebled patient being successfully treated by pituitary extract, quinine, and castor oil, as for the induction of labour.

Professor GIBBON FITZGIBBON (Dublin) was inclined to think that some of these cases were of actual post-menopausal growth, and not necessarily changes in fibroids. It was worth remembering that many women aged from

38 to 40 might nowadays get married, and it was therefore a question whether they should postpone an operation until after the child-bearing age.

Dr. W. FORDYCE (Edinburgh) questioned whether malignant changes were generally so common as Professor Fletcher Shaw's figures suggested. His own experience of fibroids undergoing malignant changes was so limited that the risk might almost be ignored. If malignancy was so common, then operation should be performed for small fibroids and not reserved only for large ones.

Dr. J. YOUNG (Edinburgh) thought that only a very small proportion of fibroids underwent malignant changes after the menopause. He also was strongly in favour of spinal anaesthesia in old and feeble patients.

Dr. J. H. FERGUSON (Edinburgh) had seen three cases of torsion of subperitoneal fibroids and three cases of torsion of the uterus itself. One of the complications of torsion was collapse from haemorrhage.

Professor FLETCHER SHAW, in reply, expressed surprise at the unanimity of those taking part in the discussion. In regard to the occurrence of malignant degeneration in fibroids, it was a very vexed question how frequently this occurred. Statistics varied enormously. His own impression was that a fibroid uterus was much more likely to undergo malignant changes than a non-fibroid uterus. He was not so convinced that malignant change was so common that every fibroid should be removed, but he thought it warranted operation in the case of the larger fibroids. In regard to anaesthesia, he agreed that the spinal method was the most suitable unless the services of an artist in general anaesthesia were available.

SOME POINTS IN THE TECHNIQUE OF THE LOWER SEGMENT CAESAREAN OPERATION.*

BY

BETHEL SOLOMONS, M.D., F.R.C.P.I.,
Master, Rotunda Hospital, Dublin.

THE lower segment Caesarean operation is such a valuable procedure that it is necessary to bring its advantages and disadvantages constantly before the medical profession, especially in view of the fact that it is neither practised nor recommended in some of the larger hospitals which devote themselves to the teaching of students. No more illuminating argument for the advantages in the operation can be brought forward than the change in opinion of that broad-minded and brilliant obstetrician Munro Kerr, who, in his *Operative Midwifery* (1916) stated that he believed that it would entirely disappear and be forgotten unless the cicatrix in the lower segment was decidedly stronger than the one situated in the upper part of the body of the uterus. He is now well known as a strong supporter of the low segment operation.¹

It is necessary to discuss various points in technique as they arise, in order that some definite mode of performing the operation may be standardized to some extent.

One of the most instructive communications in recent years is the paper by Harris and Brown on the bacterial contents of the uterus.² They show in this that the classical operation is the safest when performed at the time of election, and that the bacterial content of the uterus becomes greater and advances higher the longer the woman is in labour. This might appear at first reading to be a reason for the adoption of the classical operation, but a moment's thought will dismiss this fallacious idea from the mind; for no matter in what part of the uterus the infection lies, be it high or low, it is obvious that the incision should be in the comparatively innocuous lower segment covered with bladder peritoneum rather than in the upper abdomen in close proximity to the intestines, with the likelihood of general peritonitis. These remarks apply particularly to placenta praevia. In this short series a central insertion of the placenta was

* A paper read in the Section of Obstetrics and Gynaecology at the Annual Meeting of the British Medical Association, Edinburgh, 1927.

present on one occasion. The patient was an elderly primipara most anxious for a living child; section was entirely successful with a non-morbid puerperium. It is the operation of choice in this type of case, and the lower segment is the site of the incision, for the reasons stated above. In fact, unless statistics of the classical operation in potentially infected cases can be brought forward to disprove these ideas, the lower segment must be chosen as the operation *par excellence*.

It is not intended to delve fully into the indications; let it be sufficient to state that it should be performed for the patient who has been in labour for some time, who does not appear likely to deliver herself of a living child either naturally or with the help of forceps, and in whom the conditions necessary for pubiotomy are not present. It allows induction with subsequent trial of labour, with the definite knowledge that should the diagnosis prove to be incorrect and the disproportion be too great to permit the head to mould and pass through with the birth of a living child, section can be done with comparative safety. As a typical case No. 16 of my series may be mentioned here.

The patient was a primigravida with membranes ruptured three hours before labour pains started. In spite of strong labour, after thirty-one hours the head was still in the superior strait, much moulded, with a large caput succedaneum and the sagittal suture in the transverse diameter. The cervix was half dilated. The temperature and pulse rate were rising gradually, and the foetal heart beat was 180.

On opening the uterus a large quantity of odorous meconium came away. The child, weighing 9 lb. 2 oz., was extracted alive with forceps. This, comparing the size of the child with the menstrual history, was a case of over-carrying.

Exceptions exist to every rule, and an exception must be mentioned. If the patient is in early labour, if the baby is in imminent danger, and if there is no contraindication to the classical operation, it should be performed, for there is no doubt that the infant can be extracted with more speed.

In former days we used to practise the modified Pfannenstiel incision, and, having incised the vesical peritoneum, sutured it to the upper flap of the parietal peritoneum. We did this in one case (No. 3) of the present series, and regretted the time spent—time which is not compensated by any gain in asepsis. This case had been in labour for a week with no advance, and shutting off the peritoneum appeared to be the obvious step.

The table is kept level during the entire operation. The abdomen is opened by a suprapubic mesial incision. A large wipe wrung out in saline is placed on each side to keep back the intestines. Pituitrin 1 c.cm. is injected; this is a good practice, and less haemorrhage has resulted since the injection was given at this stage. The bladder peritoneum is cut across and the bladder is gently wiped down for a very short distance. The uterus is now incised. One of two types of incision is used, depending on the nature of the case. If the head is floating, the semi-elliptical incision, as suggested and practised by Kerr, Hendry, Holland, and others, is employed. This is a great advance on the straight transverse incision; while it ensures being in the lower segment it saves the necessity for much, if any, pushing down of the bladder, with consequent haemorrhage from pre-vesical veins. If, however, the head is inclined to fix in the superior strait—that is, if the greatest diameter would not get through the brim but is partly fixed—a longitudinal incision is used, and makes for facility. It has the disadvantage that the bladder must be pushed down, but it has a very real advantage in that the head can be handled more easily. With this incision the delivery is effected with forceps; one blade has been tried, but the whole instrument is preferred. When the head is under the hand—that is, floating—it is easily removed, either by pressure from the fundus alone or combined with pressure from under the uterus, or by placing a finger in the mouth.

Some authorities have suggested the possibility of dropping the cord back into the uterus after separation, and expressing it into the vagina; this does not appear to be reasonable. The uterus is open, the infected cord has been out of the uterus; why not take the obvious and quick method of expressing into the incision, and making sure

of its speedy departure? In addition, the suturing will be more difficult, and the possibility of an adherent placenta with necessary manual removal at the completion of the operation will increase its dangers.

In one of our cases (No. 6) the head was in the right iliac fossa. On opening the uterus it appeared simple to bring it over to the uterine incision; this was found to be impossible, and it was necessary to perform version and deliver as a breech in order to effect delivery. If a breech presents it is delivered by traction on the leg.

In suturing the uterus a word of warning must be uttered. The inferior edge of the incision is liable to retract, and it is quite possible, if this edge is not clearly defined, to suture the superior edge to the posterior uterine wall; this may sound impossible to some, but it is an eventuality which is possible if care be not taken.

The suture material has been the bane of many obstetricians. The material and method used at the Rotunda Hospital is as follows. Catgut is used all through. It is sterilized as follows: Having been wound loosely on glass reels and dehydrated by soaking in absolute alcohol for three days, it is transferred to fresh alcohol for three days more. It is then placed in Jellett's brass box, which is half filled with absolute alcohol, and the cover is screwed on tightly; the sterilizer is then placed in a saucepan of cold water, which is brought to the boil and kept so for thirty minutes. When cold the catgut is removed and stored in one part iodine solution in fifteen parts methylated spirits.

Two Guy stitches are placed in each angle, passing through all coats. A continuous suture of No. 5 catgut then embraces the endometrium and the deep part of the muscle layer; a continuous second suture of the same material encloses the other parts of the muscle. Finally, a third continuous suture brings the peritoneum over the scar. Continuous sutures are quicker and just as effective as interrupted stitches, and they do not cause gangrene of the tissues. This has been proved to our complete satisfaction in the operation of trachelorrhaphy, where the method of continuous suture is always used. The strength of the scar following the adoption of this method has yet to be proved.

The question of drainage is a very important matter for consideration. The best dictum is—when in doubt, drain; a drain can do no harm in doubtful cases, but its absence may be harmful. This is best established by cases 2 and 5.

Case 2 was a pre-eclamptic, with a generally contracted pelvis with marked transverse narrowing, the measurements being 25½, 26½, 18, 9.2, and 10.3 inches. There was no advance in labour after twenty-four hours. On opening the abdomen there was excessive free fluid, and when the uterus was incised stinking liquor amnii and foul-smelling meconium came away. This patient had a very stormy puerperium; the wound broke down and was resutured. With the help of serum, collosol iodine, pituitrin, and abdominal drainage, she recovered. Had she been drained in the first instance her puerperium would probably have been without incident.

Case 5 was admitted to the hospital from the country after three days' labour. The os was closed, meconium was coming away, the foetal heart beat was 168, and there were tumultuous movements. The head was high above the brim. The condition of affairs on opening the abdomen was similar to that present in Case 2. The abdomen was drained by means of a tube in Douglas's cul-de-sac, and the abdominal wound was drained by means of fine rubber tubing placed in the subcutaneous tissue along the whole length of the wound. The convalescence was uneventful in every way.

Drainage in suspicious cases is a most important asset. The low Caesarean operation can be performed with safety where craniotomy on the living child might be an alternative; drainage puts another weapon in our hands.

In a short communication of this kind no effort will be made to bring forward statistics as a proof of anything. There are included only those cases which have been under my personal care at the Rotunda Hospital since November last. A table is appended giving details of the 18 cases, in which there was no maternal or foetal mortality.

In the series there were 17 cases of disproportion, in 15 of which there was diminution in the pelvic measurements, while 2 were women with definite disproportion without apparent alteration in the diameters of the pelvis. The case of central placenta praevia in a primipara aged 39 has been referred to already.

Of the 18 patients 10 were primigravidae and 8 were

No.	Date.	Age.	Para.	Measurements (inches).					Weight of Infant.	Days in Hospital.	Notes of Cases.
				I.Sp.	I.C.	E.C.	C.V.	Trans.			
1	18/11/26	28	II	24.5	27.5	16.5	8.5	11.5	5 lb. 10 oz.	17	First child forceps, died at birth. Long labour with early rupture of membranes. Slightly morbid. No uterine cause discoverable.
2	19/11/26	22	I	23.5	26.5	18	9.2	10.3	7 lb. 1 oz.	57	A very difficult case, some details of which are given in the text. Very long labour with much moulding. No advance. Hyperflexion. Much free fluid and stinking liquor amnii. Discharged fifty-seventh day.
3	24/11/26	30	II						6 lb. 5 oz.	18	First labour symphysiotomy with stillborn child. Admitted with membranes gone for a week. Head above brim. No question of necessity for section. No internal pelvimetry done. Head much moulded. Approximation of parietal visceral layers. Morbid.
4	5/12/26	36	I	26	28.5	20	9	9.8	7 lb. 8 oz.	14	Head quite free after rupture of membranes.
5	7/12/26	29	I	28.25	29	18.5			8 lb. 6½ oz.	16	Admitted from country. In labour three days there with membranes ruptured. Abdomen overstretched. Head unfixed. Meconium coming away. Foetal heart 168. Os one finger. Liquor amnii and meconium stinking, so abdomen drained. Uneventful puerperium.
6	27/12/26	30	III	28.25	30	19.25	7.8	—	8 lb. 14 oz.	16	Previous labours: (1) stillborn after 48 hours; (2) stillborn after 36 hours. Head transverse: version after section. Further details in text.
7	23/1/27	28	I	23.5	27.5	20.5			8 lb. 6 oz.	14	In labour two days at least with membranes ruptured and head high. Foetal heart over 160 continuously.
8	28/1/27	26	I	25	27	20	9.7	—	7 lb. 8 oz.	14	After labour. No advance of very hard head which remained above brim. Os two fingers.
9	28/1/27	36	I	25	27	20	8	—	5 lb. 6 oz.	22	On admission head high. Os 1 finger. Cervix applied. No advance. Cervix oedematous. Hyperflexion. Moulding. Morbid. Pneumonia.
10	8/2/27	22	II	24.5	27.5	19	10.7	11.4	8 lb. 10 oz.	14	Brought from country. Large abdomen. Brow presenting. Blood-stained liquor amnii. Intense moulding. No chance of changing presentation.
11	15/3/27	23	I	26	26	19			8 lb. 14 oz.	14	Long labour four and a half days with no sign of largest diameter coming through superior strait. Much moulding.
12	15/1/27	24	I	28	29.5	19	9.4		8 lb. 14 oz.	14	Breech originally—turned by external version. Müller at 36 weeks did not indicate induction.
13	2/5/27	26	VI	25	27	17	—	—	7 lb. 15 oz.	14	Fundus distinct with high head. Very bad history. Prolapse of cord and inertia in last confinement. Patient a week over term. Temperature 101°. Bandl's ring high up. Head presenting asynclitic.
14	6/5/27	39	I	—	—	—	—	—	7 lb. 7½ oz.	13	Central placenta praevia. Details in text.
15	25/5/27	34	V	24	26	20	7.5	11	6 lb. 5½ oz.	13	Previous labours: (1) stillborn; (2) perforation; (3) pubiotomy; (4) classical section. Admitted with membranes ruptured. Meconium coming away. Foetal heart 112.
16	15/5/27	24	I	25	28	21			9 lb. 2 oz.	19	Disproportion, over term four weeks. Trial of labour for 26 hours after membranes had ruptured resulted in one-third dilated os. Five hours more gave no advance. Temperature and pulse raised. Uterus rather tonic. Foetal heart 180. Moulding, caput, hyperflexion. Head in upper strait. Lower segment very thin. Smelly liquor amnii. Drainage with one tube.
17	28/6/27	34	III	25.5	27.5	16.5			7 lb. 8 oz.		First labour, baby 5½ lb. which died with denting of skull over both parietals. Second labour, 6 lb. 11 oz.; classical section. Third labour, admitted with ruptured membranes, head quite free; good labour; no advance.
18	3/7/27	39	II	25	26	17.5	9.5	10.5	8 lb. 7 oz.		First labour, perforation. Seen a week before labour on this occasion—too much risk in induction. Decided to give trial. Head quite free above brim. No advance with labour.

multiparae; of the latter, No. 1 had had a baby which died at birth after a difficult labour; No. 6 had two stillborn children after forty-eight and thirty-six hours respectively; No. 15 was a 5-para, whose four previous labours had resulted respectively in stillbirth with forceps, perforation, pubiotomy, and classical section. The low segment is particularly suitable for this type of case, especially when adhesions are present around the old scar, or when there is a history of infection in the previous labour—an incision in the uterine scar in these circumstances might light up an old infection—apart from this it seemed only fair to let her have variety. No. 17 was a 3-para. The first child was born with dents on both parietal bones; the second labour terminated in a classical Caesarean section.

Nothing special need be said of the other cases, details of which are given in the table, beyond the fact that all of them were given a trial of labour and that delivery *per vias naturales* was obviously impossible; in fact, there have been two or three women with stillborn babies who might have benefited by the operation.

The lower segment operation has now come to stay, and credit must be given not only to the workers of the present day, but to those of decades back whose names have been extolled in the historic paper by De Lee.³

Conclusions.

1. In view of the fact that proof has been brought forward that the longer labour lasts the higher will be the bacterial content of the uterus, the lower segment operation is the choice where section is indicated for patients in labour.

2. It is indicated for placenta praevia in selected cases. The lower segment is preferred to the upper, because a scar covered by peritoneum is less likely to lead to infection in the general peritoneal cavity.

3. The lower segment operation allows a trial of labour.

4. The incision in the uterus should be longitudinal or elliptical, depending on the position of the head.

5. The placenta should be delivered through the uterine incision in all cases.

6. Suture of the uterine incision by two layers of continuous catgut sterilized by the alcohol-iodine method has been attended by immediate post-operative success; the remote results have yet to be ascertained.

7. Drainage of the abdomen for forty-eight hours should be performed in all suspicious cases.

REFERENCES.

¹ Munro Kerr: *Amer. Journ. Obstet. and Gynecol.*, xii, 729. ² Harris and Brown: *Amer. Journ. Obstet.*, xiii, 2, 133. ³ De Lee: *Amer. Journ. Obstet. and Gynecol.*, x, 103.

DISCUSSION.

Professor GIBBON FITZGIBBON (Dublin) stated that he had given both the classical and the lower segment operation a trial. He was strongly in favour of the lower segment operation, since it gave them an opportunity for a trial labour. It was not an easy operation, either before the onset of labour, or early in labour before the lower segment had become properly differentiated and was well on the stretch. His practice was to deliver the placenta through the wound.

Professor McILWRAITH (Toronto) said that the lower segment operation was gaining in favour in Canada. They did not employ low section in placenta praevia or in cases where it was to be expected that the patient would go through a subsequent natural labour. He described a case in which the classical section had been performed when in a later pregnancy; rupture occurred, not through the uterine scar, but through the lower segment.

Professor HENDRY (Glasgow) welcomed the emphasis that had been laid on the opportunity for a trial labour which this operation offered. He did not think it was a good operation for placenta praevia, and he left the placenta inside as a general rule. He always used continuous catgut sutures, and had never found any necessity to drain.

Dr. J. H. FERGUSON (Edinburgh) referred to the methods of sterilizing catgut, particularly the length of time required for each size.

Dr. SOLOMONS, in reply, said that he found it difficult to say what size of catgut he used, as different makers seemed to employ different standards. Roughly speaking, the thicker the gut the longer it was left in the box. In spite of what others might say to the contrary, he would continue to drain when in doubt. His objection to leaving the placenta behind was that cases might arise when it was necessary to explore for it, and this would add enormously to the risks of the operation.

THE UNIFICATION OF LOCAL HEALTH SERVICES.

I.—THE WORK OF A LOCAL HEALTH AUTHORITY.*

BY

A. S. M. MACGREGOR, O.B.E., M.D., D.P.H.,
F.R.F.P.S.G.,
Medical Officer of Health, Glasgow.

THE administration of the health services of the country is admittedly defective, and there is a general consensus of opinion that the time for unification is becoming ripe, although the precise method of accomplishing this and the difficulties surrounding it are still subjects of controversy. The defects which are to-day under criticism are very largely the product of the historical evolution of local government. The tendency of administration hitherto has been to create from time to time special local bodies responsible for the conduct of particular services wherever these could be organized as separately functioning independent units. It is not necessary to enter into the reasons for this multiplicity of services and the hesitancy to face the problems of unification. Modern ideas are causing the whole complicated structure to be regarded as somewhat of an anachronism. The essentials of successful administration of the health services are now perceived to lie more in the direction of interdependence than of independence, and the phraseology in common use includes the terms co-ordination and co-operation, if not actual unification.

The various administrative bodies concerned in the treatment and prevention of disease now find themselves exposed to the atmosphere of modern thought. Their continued separation and isolation are becoming more and more subject to criticism. The nature of the functions they perform can no longer be regarded as falling into watertight compartments. A rigid separation between curative and preventive medicine can no longer be maintained as a working proposition.

The confusion has been still further augmented by the rapidly increasing responsibilities thrown upon local public health administration in recent years. Public health laws and regulations have followed one another in breathless haste, and bodies created for simple purposes now find them-

selves endowed with immense and complicated statutory functions. While larger local authorities have been able to absorb and apply these measures, the rapid growth in the scope of health services has raised acutely the question of the power of small authorities (apart altogether from considerations of capacity) to function efficiently, and many have indeed passed beyond this stage. It is quite clear and well recognized that efficiency, at least as regards major services, is proportional to the size of the area administered, its population, and rateable value. This question of the size of the unit of administration lies at the root of the problem, and is one of the reasons which have caused the whole structure of local government—its merits and demerits—to be reviewed in recent years from many angles. The determination of what is to be regarded as a suitable area for local administration is a difficult but fundamental problem. The anomalies connected with the health services have become most apparent, and have helped to point the moral.

A brief summary may be given of the conceptions which have occurred to various reformers as contained in the results of the inquiries which have been conducted by, or on behalf of, the Government. All have recommended unification more or less strongly.

The Local Government Committee, known as the MacLean Committee, 1918, recommended the abolition of the Poor Law and the merging of its functions in those of local authorities. It appears to be the declared intention of the Government to introduce a bill to give effect to this proposal. From the public health standpoint this would mean that the medical functions of the local authority and the Poor Law authority would completely coalesce. It is interesting to observe the views then held by the late Sir Robert Morant, at that time permanent secretary to the Local Government Board. Looking far beyond the terms of reference to this committee, he signed the report on the following assumptions:

"I assume that before transference takes place the necessary extension by Parliament and by the Government departments of the various Acts and arrangements relating to the health of the people shall have been completed, on broad comprehensive lines, for securing the provision in all localities of public services designed to prevent, at least as much as to cure or to mitigate, all forms of ill health and disease; such various functions, where they are shared between two local bodies, to be exercised by them in the closest organic co-operation with one another, by interlocking representation of each on the other and by dovetailed schemes of work."

The Royal Commission on National Health Insurance, with commendable courage, recommended that "Insurance Committees be abolished and their powers and duties transferred to appropriate local authorities." This proposal would, if carried into effect, do more than fulfil their other recommendations, that the continually expanding medical services should be maintained in close relationship both at the centre and in their local administration, and that, in considering any changes or developments in the insurance medical services, regard should always be had to the importance of the fullest possible co-ordination with other health services. The preamble to the Insurance Act states that it is an Act for the *prevention* and cure of disease. Regarding maternity benefit from this point of view, it is clear that a sound insurance scheme should concern itself with the introduction of competent midwifery into the homes of the beneficiaries, if it is to be truly preventive. But a service of this kind is a function of the local health authority, and it is obviously anomalous that the latter should be endeavouring to cover the whole ground, while the former is dealing with the problem partially and imperfectly. No doubt such considerations led the Commission to say that the service element should be administered by the local health authorities.

The Consultative Council on Medical and Allied Services in England (1920) propounded a comprehensive scheme for the systematized application of medical and allied services, which need not be given in detail. In the report the following remarks occur: "Preventive and curative medicine cannot be separated on any sound principle." "The organization of preventive medicine has become insufficient because it fails to bring the advantages of medical knowledge adequately within reach of the people." The Welsh Consultative Council (1920) propounded a somewhat

* A paper read in the Section of Preventive Medicine at the Annual Meeting of the British Medical Association at Edinburgh in opening a discussion entitled "Should all public health administration be concentrated under a single department, and the immediate control in each executive area be vested in a single individual?"