The chlorides. Routine investigation of the chloride content of the C.S.F. is unnecessary. The C.S.F. chlorides follow closely the serum chloride and the fall in chlorides which occurs in tuberculous meningitis to which so much significance is attached, is only symptomatic of a general depletion of the body chlorides.

Radiography

The radiography of the skull and vertebral column demands a high degree of technical excellence. All too commonly interpretation of poor quality plates is attempted with sorry results. The first principle in diagnosis then, is radiographic technique. A.P. lateral and stereoscopic skull views should be taken. The next need is for method—how to look at the radiogram. The cranial bones should be studied first, with attention to :

- (1) The size of the cranial cavity.
- (2) The thickness and density of the bones.

- (3) The suture lines.
- (4) The venous channels.
- (5) The paranasal sinuses.
- (6) The sella turcica.

Having noted any abnormality, the presence of shadows within the cranial cavity should be noted. Calcification may normally be observed in the falx, the pineal body and the choroid plexuses.

Similar principles apply to the examination of the vertebral column. Here, attention should be directed to :

- (1) The alignment of the vertebrae.
- (2) The shape and size of the vertebral body.
- (3) The density of the vertebral body.
- (4) The width of the intravertebral disc.
- (5) The appearance of the laminae.

Accessory radiological examination such as air encephalography, angiography and myelography must be undertaken in specialist clinics.

THE RELATIONSHIP OF THE MEDICAL STUDENT TO THE UNIVERSITY

A Suggestion for Widening the Medical Students' Horizon

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The medical student has become the object of much attention with regard to the form and length of his training (Lewis, 1944) and his selection. In this latter field the problem, rendered acute by the great increase in aspirants to the medical profession, has been discussed by Smyth (1946) as it presents itself to the committee whose job it is to pick out those most likely to become satisfactory doctors. He records the results of investigations into methods of selection recently under trial at University College, London, which have been analysed statistically by Wilkie (1946).

The relationship of the medical student to the University as a whole is a problem that might well be looked into at a time when our

thoughts are directed towards planning the most efficient scheme for the education of medical men of the future.

The place of the student of medicine in the academic world tends to be isolated on account of the more arduous nature of the studies required of him in comparison with those in other spheres of University undergraduate education. Again, in many instances, he is segregated immediately on leaving school into institutions providing preclinical instruction specially remote from the traditional atmosphere of the University. Intercourse with young people of other faculties, *viz.*, science, arts, laws, engineering and theology, does not exist. The usual University activities in the nature of athletic clubs and other less strenuous

societies that form the common inter-faculty meeting grounds can have no existence in 'the medical college' composed entirely of medicals. Medical students, as a whole, tend to isolate themselves from other students and the reason for this may lie in the fact that medical studies break quite away from those subjects taken at school, whereas, in most of the other University faculties, studies are directed to the more advanced aspects of subjects first followed at school. Perhaps this tends to make the medical feel superior to other students and to result in the virtual exclusion of the latter from the society of medicals. Our medical student is thus often deprived of those features of University life that broaden the mental horizon. This proves a serious defect in his armamentarium when he comes to face the patient over the counterpane where a working knowledge of human material is invaluable.

Ideally a medical student should undertake his preclinical studies in a University atmosphere and later pass on to his clinical work in one of the large teaching hospitals. Because of the present distribution of medical schools, this happy state cannot be achieved in every instance. As there is no real substitute for it, we must look for other methods of broadening the students' outlook in as congenial and as healthy a way as possible.

As a result of a study visit to the hospitals of Paris, a brief impression of which is given below, it appeared that a partial solution might lie in a scheme in which English medical students, especially those in the more advanced years, might change places with their opposite numbers in the hospitals of the medical faculties of foreign Universities for a period of one to two months in the summer vacation. The embryo doctor would find himself in a country whose customs were foreign and the approach to medical, surgical and social problems apparently very different from his own. The impact of the unusual is bound to provide a mental stimulation for the student who would reflect that perhaps there are other methods and outlooks than those held in his hospital which provide satisfactory results, for patients do respond to treatment in Paris just as well as in London! The project would be well worth while if it brought home to the

student that his own hospital forms but a very small part of the medical world and that a critical outlook must be cultivated and maintained. In addition, a complete change of scene would be of itself a recreation, and trips to various local places of interest could be used to dilute the study programme. The expedition might be rounded off by a not too strenuous walking tour in some congenial district in which the participants could be accommodated in the large and frequent youth hostels. On the continent these provide for many nationalities and most occupations an invaluable common meeting place such as does not exist in the similar organizations in Britain. The modest expenditure for this type of termination of the study tour need hardly be stressed and the opportunity of healthy outdoor activity could be indulged in by all. Those who are well endowed with athletic prowess could arrange to meet their opposite numbers in sporting events ranging from rowing and rugby to table-tennis. If this idea were adopted no increase in the length of the already overburdened medical curriculum need occur, for the student would have an opportunity of spending his summer vacation in an inexpensive, profitable and healthy atmosphere.

Many of the present-day medical students have served in various arms of H.M. Forces at home and overseas, and it is generally agreed that they distinguish themselves from the ordinary student in their wide and balanced outlook upon life. Here we have material evidence that travel and novel conditions mature the mind and this lends force to the argument that a study tour with a medical flavour as postulated would markedly improve the calibre of our potential doctors.

Report of a Study Visit to Paris Hospitals

(This report contains the reactions set down by a medical student in his first year of clinical studies at a well-known London teaching hospital. He had visited no other major hospitals in the British Isles or abroad.)

Accommodation was provided in a comfortable modern room in the Cité Universitaire, Paris. This delightful residence, under the

administration of the University of Paris, is situated on the outskirts of the metropolis on a site of about 20 acres. The dominant feature of the whole scheme was that students of each nationality were housed in large buildings constructed in conformation with an architecture typical of that nation. Thus for example, the Maison Franco-Britannique was in a Tudor style; the German students were housed in an unmistakably Teutonic edifice, the Deutsche Haus; students from Indo-China were made to feel at home in a structure reminiscent of a pagan temple. Meals were taken in a large central refectory club where a 'help-yourself' system of feeding was in existence, and here students of all faculties and nationalities met, ate, and recreated. The open spaces between the buildings were devoted to carefully laid out lawns, sports grounds and a swimming pool. The whole undertaking was obviously designed for student comfort. It was an easy 'Métro' ride to the Sorbonne and the charges for accommodation were very reasonable.

No difficulty was experienced in obtaining introductions to members of the medical staffs of the Paris hospital system. The ancient Hôtel Dieu, under the shadow of Notre Dame, and the Hôpital Beaujean-Clichy, built along the ultramodern lines of Johns Hopkins Hospital in U.S.A., were selected as being suitable examples for our study. Words cannot express the warmth of welcome extended by the French surgeons and physicians to the visiting Englishman who found himself the sole British representative among some 250 foreign students of both sexes on 'échange' from Belgium, Czechoslovakia, Holland, Hungary, Jugoslavia, Luxemburg and Poland. The only common tongue was French and affairs were conducted in this language.

Hôtel Dieu was probably one of the earliest hospitals to be established in Paris and is housed in an old building. The 'salles' present a distinctly ecclesiastical flavour with narrow arched windows showing a marked disinclination to open. Patients were accommodated along each side of these wards in the usual manner. Above the bed on a shelf reclined a urine bottle unashamedly revelling in the vulgar gaze. The patients took a lively interest in the ward round in a way quite

unusual in British hospitals. Washing facilities appeared to be non-existent and only M. le Chirurgien was permitted to lave his hands in a little alcohol. Our request to wash at the end of the ward round was greeted with some amazement. The tap, eventually found, delivered the usual thin stream of water so favoured by the French plumber and a morsel of soap was produced. The towel problem was solved by the houseman divesting himself of one of several cloths draped around his middle. This form of attire seems to be a feature of most workers in this hospital.

Theatre technique presented some surprises as onlookers were not expected to don special clothing for the students' gallery. Only the surgeon and his assistant wore the usual theatre garb with, however, thick rubber gloves such as we employ for post-mortem examinations. A Clover's inhaler was seen in action for the first time. The surgeon appeared to work with just as much precision and skill as his English counterpart.

Hôpital Beaujean-Clichy towered above the suburb in which it was situated and appeared to embody most of the modern ideas in American and English hospital construction and equipment following as it did its American model. Each floor was decorated in a different colour—a useful guide as to position when each floor was upon the same plan. The topmost floor was devoted to tuberculosis cases with facilities for open air and artificial pneumothorax therapy. The roof garden above was used by convalescents.

Out-patient clinics seemed to provide at least as much material as their English equivalents, as well as some of the rarer skin and tropical conditions exhibited in colonials.

The visit was rounded off by a leisurely and inexpensive walking tour of the French Château district in the Loire valley using the Auberge de Jeunesse, the French youth hostel system.

Conclusions

From what has gone before it can be seen that visits to foreign medical centres by students is of great value and should be encouraged. Continental peoples show a greater willingness to facilitate student travel

than their insular brethren (*e.g.*, French museum prices are considerably reduced for *bona fide* students).

The organization of such study visits might well be undertaken by the medical societies of the institutions concerned with the beneficent co-operation of the college or hospital authorities and the help and advice of the academic staff of the medical faculty. A recognized University teacher should accompany the students upon their visit to give them an official status, and given a little tact, the presence of a member of the staff should in no way detract from the students' enjoyment and should be of benefit in providing a focusing point for the academic side of the trip. Organizations such as the Student Travel Association would be able to assist those who do not wish to shoulder the complete task of arranging the study tour.

In the study visit recorded above, the expenditure at 1939 values for four weeks was under £15. With careful organization, the cost could be kept well within the student purse even at present-day prices.

However, by far the best system of running such a scheme is that in which facilities for hospitality for foreign medical students are offered on this side of the channel in exchange for similar facilities for our students abroad. Another advantage of this idea is that British hospitals would be open to foreign students to enable them to study our approach to similar problems: opportunities to meet foreigners cannot but contribute to a better understanding, for science knows no frontiers. The co-operation of British hospitals and their staffs would be required for a fully developed exchange plan and it is felt that many of the

honorary staff would be willing to arrange their vacations so that they may bring their authoritative views and teaching experience to benefit the foreign medical students on 'échange.'

Summary

The relative isolation of many medical students from their fellows of other University faculties is pointed out. Ideally all preclinical students should undertake their studies in a University atmosphere. In practice owing to the present distribution of medical schools, the effect of such an atmosphere in broadening the mind cannot operate in the case of a number of students.

As a partial solution to the problem, it is suggested that a scheme be developed in which advanced medical students should exchange places with their opposite numbers in a foreign University hospital for a period in the summer vacation. Such a stimulus would give breadth to the student's perspective. The study visit could be terminated by a leisurely walking tour utilizing youth hostels in some suitable area of the foreign country, providing a further opportunity for examining a cross-section of many nationalities and occupations at close quarters and indulging in healthy, gentle exercise. No lengthening of the already protracted medical curriculum is required and the cost should be far from prohibitive, especially if reciprocal hospitality could be offered to foreign medical students in the British Isles.

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