

The Role of Background Training in Other Fields

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Introduction

I have been asked to speak on the role of background training, in the training programme of a Plastic Surgeon. By this is meant I believe, training in Basic Sciences, Para clinical subjects and allied specialities. Plastic Surgery occupies an unique place among the subjects classified as specialities in that its scope is far more broader and general than all the other regional specialities like Thoracic Surgery, Neurosurgery etc. This being so, the importance of proper background training can be realised.

Selection of Trainees

In my opinion candidates can be taken up for training after a minimum period of two years after graduation, i. e. after passing the M.B.,B.S. Examination. In these two years the student would have spent the first year as a compulsory rotatory house officer and the second year as a senior house officer. During the period of senior house surgeoncy he must have worked for a minimum period of six months in General Surgical wards and the other six months in allied specialities and Casualty. The consensus of opinion now seems to be against insisting on a basic post graduate degree in General Surgery. There is lot of controversy about this and I do not propose to enter into it now. In this context I would like to quote Mr. B. K. Rank who while speaking at a

Symposium on "Training of Surgeons in the Special Branches of Surgery" during the annual meeting of the International Federation of Surgical Colleges held in Rome during September 1963, made the following observation: "Some further period therefore of general surgical apprenticeship (beyond what may have been done in the first two post graduate years) is essential. I do not believe, however, that this should necessarily go as far as obtaining a Diploma in General Surgery, if this implies, as it should do, a full period of General surgical training. Opinion differs on this matter, but remember life is short, and active surgical life is now a days much shorter." We should not forget also the cost involved for the candidate in his obtaining a post graduate degree in General Surgery. Many persons cannot afford this and to my mind insisting on basic post graduate degree appears pointless and unnecessary.

Object of Training

The object of training is to shape the young Surgeon to have a comprehensive outlook of the whole field of Plastic Surgery and not merely to train him to be a good technician. Thus he should be exposed to various types of influences during his apprenticeship as a trainee in Plastic Surgery. Among these influences is the background training in Basic Sciences, Para

Clinical Subjects and the other allied specialities.

Duration of Training

The total period of training should extend to three years as a full time student. The training period can be divided into two phases. The first phase will be the background training and will extend to one year. The second phase will be the actual training in the speciality and will extend to two years. I propose to deal only with the first phase of this training.

Training Programme

The first phase of the training programme will consist of the following subjects :

1. *Basic Sciences* : Anatomy, Physiology and Biochemistry

2. *Para Clinical Subjects* : Pathology and Bacteriology.

3. *Other allied Specialities* : Orthopaedic Surgery, Ophthalmology, Basic General Surgery (i.e.) Principles of Surgery, E.N.T. diseases and Anaesthesiology.

Training in Basic Sciences and Para-clinical Subjects :

Basic sciences and Pathology form the bed rock of clinical studies. Teaching of these subjects as a part of the training for higher qualifications has to be adopted in some form or other. The aim is to ensure that the candidate has learned adequately these subjects to have an intelligent grasp of the clinical part of his studies. This means that the study of these subjects should be such as to lay emphasis on the applied aspects of these sciences. Having decided this the next question that has to be decided is the method by which this training is to be imparted and who are the

best people to impart them. It would appear that teaching of these subjects is best done by the recognised teachers of these departments in collaboration with their clinical colleagues, so that there will be an in-service method of teaching. As to the method of imparting this training, initially perhaps it will be useful to have some formal lectures on the general principles of physiology, a brief and general survey of the human anatomy and general pathology. After this portions must be selected that are relevant to our speciality and these must be taught in detail by means of lectures, demonstrations and laboratory work including anatomical dissections of certain parts of the human body which are of special interest to the Plastic Surgeon like the Hand, Head and Neck etc. The candidates must have in-service training in these departments. For example, in the Pathology Department, he must be made to do the routine work of receiving specimens, describing them, and selecting the portions for microstudy. He must be made to write the micro findings and must discuss his findings with the senior members of the Pathology Department. The candidate must be made review the slides on general pathology but the emphasis must be on skin pathology—the degenerations, tumours granulomas etc. Similarly the candidate must work in the Bacteriology Department and he must be given a thorough review of the Bacteria and fungi causing skin diseases. During the period of his training in the Pathology Department he may be taught the art and practice of clinical photography.

Training in Other Allied Specialities

The usefulness of the background train-

ing in these specialities is obvious. These are specialities whose work overlaps with many conditions which the Plastic Surgeon has to deal with. Under this heading I will include General Surgery also. During this period he must be taught the principles of surgery. A period of work in the general surgical wards will train him in the management of common surgical conditions and emergencies. The trainee should also work by rotation as a clinical assistant in the Departments of Orthopaedic Surgery, E.N.T. diseases, Ophthalmology and Anaesthesiology. During his stay in the Orthopaedic Surgery Department he must familiarise himself with the working of the Department of Physical Medicine and Rehabilitation. He must visit the Brace shop and see the fabrication of the various types of splints and appliances. This will come in very handy in the management of hand cases later on. Many of us forget the importance of anaesthesiology in our training programme. A surgeon must have a basic idea about all the aspects of anaesthesiology. He must have practical training in the art of induction, intubation and maintenance of the patient under anaesthesia. This training will be useful in times of need and in an emergency.

Outline of the Training Programme in Basic Sciences, Para-clinical Subjects and Allied Specialities

Duration One Year

1. Anatomy, Physiology and Biochemistry . . . 3 months
2. Pathology and Bacteriology . . . 3 months
3. General Surgery . . . 3 months
4. Orthopaedic Surgery . . . 1 month
5. E.N.T. Diseases and

Ophthalmology . . . 1 month

6. Anaesthesiology . . . 1 month

Methods of Assessment

Objectivity should be the basis of any method of assessment. Should there be a formal examination or not after the training period is the question. The consensus of opinion seems to be in favour of examinations. This examination should be conducted at the end of the first year and must contain the usual parts (viz.) Written, Practical, Clinical and Oral. The aim should be to find out how much the candidate knows and not how much he does not know. Sufficient time must be allotted to assess the candidate's knowledge thoroughly. Credit should be given to the day-to-day work done by the candidate by inspecting a work diary which all the candidates must be asked to maintain and this diary must be certified by the teachers under whom he has worked.

Conclusion

In concluding I would like to emphasise the following points:

1. The background training in Basic Sciences, Paraclinical subjects and allied specialities is essential for higher study and specialisation in Plastic Surgery.

2. Teaching of the various subjects must be done by the recognised teachers of these departments in collaboration with their clinical colleagues. There must be an in-service method of training.

3. It is better to have a formal examination at the end of the training period.

4. Only successful candidates must be allowed to register for the second phase of the training programme.