EXPERIENCES WITH RECONSTRUCTIVE SURGERY AS A JOINT VENTURE BETWEEN A GENERAL HOSPITAL AND A LEPROSARIUM

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Although the technique of this speciality has been fairly well established, its placing is still under discussion. Of course one should realise that the loose term 'reconstructive surgery' is a composite work of physiotherapy, occupational therapy, crafts training, and social rehabilitation. The medical and public health aspects also come into the picture. In fact they are the very foundation on which we work.

It has been argued with considerable strength that as a surgical speciality reconstructive surgery in leprosy belongs in a general hospital, or—when available—in the orthopaedic or plastic surgical departments of a bigger hospital. On my return from Vellore in 1961 circumstances over which I had no control placed me in a situation where I have been able to gather some experiences with this approach. This paper is an attempt at evaluating these experiences.

For almost two years reconstructive surgery has now been undertaken as a joint venture between a leprosarium and a general hospital, where my permanent residence is. In order to understand the picture a brief description of the two institutions will be given.

The leprosarium, Santipara Leprosarium, is comparatively new and is at present able to accommodate about 250 patients, most of whom come from local communities. The leprosarium was originally of the 'home type', intended to be a home for the homeless and cast out. Even though a certain emphasis is now placed on the 'hospital idea' with short term admissions and continued treatment at the patients' own homes, a significant number of the patients are still of the permanent category. This means a large proportion of highly infectious lepromatous cases and a large proportion of cases with long-standing extremely difficult deformities. The medical staff consists of one medical officer, one lady physiotherapist, one senior nurse, some locally trained 'compounders', and otherwise patient staff. A physiotherapy room and a small, but adequate theatre has been provided. The leprosarium has a hospital side with 30 beds, mostly occupied by reaction cases, severely ill patients, and ulcer cases. The inmates are housed in cottages with fairly long distances to the central facilities. The climate is hot and wet, sometimes cold and dusty.

The hospital, Sevapur Hospital, is a 50 bed rural hospital. Two medical officers, one senior midwife-cum-nurse, one senior nurse, and a number of 'compounders' and 'nurses' of varying professional

standing are employed. This hospital runs an extensive surgical service and has a fairly good equipment.

The general plan of the joint venture is: The patients are admitted to the leprosarium or selected from the inmates. Preoperative physiotherapy is conducted there by the well qualified physiotherapist. When possible the surgeon will visit the leprosarium at monthly intervals, when he will join in preoperative assessments and selections, postoperative assessments, and if convenient will perform a few operations assisted by the resident medical officer. The main bulk of the surgery is undertaken at the general hospital, the patients being transported to and from the hospital by car or by public transport. Postoperative physiotherapy is conducted at the leprosarium. Lack of personnel and funds have so far prevented the establishment of a real craft training programme. The majority of the inmates are expected to partake in the agricultural programme of the leprosarium. No organized attempts at helping the discharged patients to a social rehabilitation are being made.

From April 1961 to December 1962, 90 surgical procedures were performed, of these 10 were done at the leprosarium. This is not the place for a full assessment of the results. However, the overall picture is of considerable interest. Most of the results have been satisfactory and only few have failed completely. But compared with the results that can be seen at training centres these results are not up to standard.

There are certain advantages with this programme: The surgeon maintains a close contact with general surgery, and he may be able to utilise his specialised knowledge to help other patients. I fully admit these advantages, but I think they are over-valued, particularly the last one. The important reason is that in order to let sufferers from other paralysing diseases benefit from his work, the surgeon must perforce have a fully qualified physiotherapist at his disposal.

The disadvantages are many:

The problem of surgically correctible and preventible disabilities in leprosy is immense. *A rough estimate shows that at this moment not less than* 2 *million operations are waiting to be done on leprosy patients in India alone.* If we are to have any impact on this problem, the amount of work a general or orthopaedic or plastic surgeon can interpose between his many other patients is far too little.

Reconstructive surgery alone, with no real attempt at social and economic rehabilitation, is hardly worth the trouble. A surprising number of people are able to work with a claw hand or a drop foot. The important emphasis is not so much on the technical reconstruction of a close to normal function as on the teaching of how to use this BETTER hand and BETTER foot to give BETTER service.

The daily presence and active interest of the surgeon in the physiotherapy programme is extremely important. One reason is the

help and advice he may be able to give. More important still is the fact that this is where he learns from his mistakes. Nothing keeps a surgeon on his toes as the critical co-operation of a competent physiotherapist.

Difficult travel conditions and the rarity of the surgeon's visits to the leprosarium tend to exclude a large number of cases from the benefits of surgery. These are mostly the tricky cases where the surgeon is unable to follow standard techniques, and where his personal presence is extremely important to the physiotherapy programme. It has been argued that a strict selection should be undertaken to exclude these cases. The reason is that in this way you will gain the confidence of the patients, who for a long time only see comparatively good results. In actual fact no such selection is possible. If you exclude the difficult cases from your list, the patients will loose faith and interest. And after all, one of the most important impacts of surgery on the leprosy patients is the amount of intense personal interest that is being taken in them.

The surgeon should participate in the work as a whole. The majority of the sufferers from leprosy are not found in the institutions. The physiotherapist-surgeon team must at least to some extent participate in case finding and education.

In this particular programme, the distance between leprosarium and hospital, 100 miles, is prohibitive. But even much shorter distances will hamper this work so much that it cannot be done as it should and can be done. The decisive factor is the full time occupation and constant presence, which alone will secure the best utilisation of the available personnel.

An important part of the work should be training, both of the resident staff and of trainees, be they surgeons or paramedical workers. When the work is split between two centres with a strictly limited programme, no training is possible. There will be probably a fairly competent theatre staff at the general hospital, but unless a steady amount of surgery is done at the leprosarium, the quality of assistance obtainable there will never reach a high standard. At the general hospital the staff will only see certain phases of the work and will have no chances of training. Under this set up the surgeon has no chances of sharing in the extremely important training of paramedical workers.

Although the demands for equipment are relatively modest, it is a moot question if we can afford to maintain it under conditions where it is not put to its full use. Transport of equipment between hospital and leprosarium is impractical.

Very few hospitals in this country are so well staffed, that they can afford to let a senior surgeon leave the hospital regularly. It is not so much the economic loss for the hospital. It is the more important question of a number of patients who have to be turned

away or asked to wait for the return of the surgeon. The comparatively large amount of time that has to be spent in the general hospital also tends to take away the surgeon from other patients.

Any medical man will be keenly aware of the need for maintaining and developing his skill and knowledge. This requires both a reasonable number of patients for him to work with, but it also requires conditions under which he can evaluate his own work in the light of other peoples' experiences. In a busy general hospital the demands on the surgeon will be so great and varied that this becomes very difficult, if not impossible.

Some of the less satisfactory results can undoubtedly be attributed to the travel up and down before and after surgery. The dust and dirt of the bumpy Indian road is not exactly the best treatment of a newly operated patient. So far we have had no real difficulty with public transport. But it is well known that people with recognized stigmata of leprosy are often not accepted on public transports. If this had been a simple problem of protecting the travelling public against infection it could have been tackled in a rational way. But it is rather a social ostracism that is very difficult to handle.

The conclusions are very straightforward:

As far as possible every sufferer from preventible and correctible disabilities due to leprosy has a right to the benefit of this service. The best way of obtaining this goal is by placing the whole team, comprising physiotherapist, occupational worker, craft trainer, social worker, and surgeon in the leprosy hospital. This will maintain the important connection with leprosy work in general and will give ample opportunities for teaching and learning. The field is in itself so large that there is very little danger of the surgeon losing contact with sister disciplines in surgery. It is far more dangerous if he loses his skill in this particular field.

Scarcity of workers and lack of funds make it impossible to open this service in all leprosaria. A better plan is to open centres on a regional basis and extend assistance to outlying leprosaria. How this should be done is outside the scope of this paper.