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EDITORIALS

DISABILITIES OF THE HIP JOINT

The mere variety of procedures advocated for the operative treatment of osteoarthritis of the hip and for other conditions causing pain and instability is itself a sure indication that no one operation is uniformly successful. The series of articles in this number of the Journal confirm this trite observation. The hip now rivals the spine, the shoulder and the hallux for the number of operations designed for the relief of pain, correction of deformity and securing of stability in these regions. And there will be more to come, for it seems unlikely that there will be a metabolic treatment for degenerative joint changes comparable with treatment beginning to appear possible for the arthritides of the rheumatoid group.

Four main procedures are in common use—denervation, displacement osteotomy, arthrodesis and arthroplasty. All owe their success, probably, to their capacity to relieve stretching of the capsule and synovial membrane, often by means of temporary ablation. Of the three main methods of denervating the joint — neurectomy, cordotomy and capsulectomy—the last is increasingly favoured in some countries and appears the best of an unimpressive trio. Possibly it has a limited application in elderly people who cannot withstand any greater surgical adventure, especially when pain is severe but there is reasonable range of movement. In their admirable article, Osborne and Fahrni have at last explained how the displacement osteotomy advocated by the late T. P. McMurray may help by redistribution of the stresses acting on the hip. Though a much more useful operation than many surgeons have thought, it has two defects: it must be followed by prolonged immobilisation in plaster of Paris, which causes stiffness of the knee; and it alters the configuration of the upper end of the femur. This second effect makes any later reconstructive procedure difficult or impossible.

Perhaps the greatest controversy ranges over the relative merits of arthroplasty and arthrodesis. Even if there was agreement on this issue, still there would be arguments about the merits of this or that method. When both hips are involved it is now generally agreed, however, that arthroplasty is the procedure of choice. There are few who will deny that in the past quarter of a century the greatest single contribution to reconstructive surgery of the hip has been the painstaking work of Smith-Petersen. Most surgeons agree that “cup” arthroplasty, carefully performed and followed by intensive and thorough post-operative exercises, is, so far, the best arthroplasty for many hip conditions. Indeed, it might be cautiously prophesied that an operation of this kind—improved, it may be, in matters of technique and materials—will ultimately be the best solution for most chronic hip afflictions. It must be admitted, however, that up to now, in Great Britain, excision of the femoral head and neck—with or without an osteotomy as described by Batchelor—is usually found a

better treatment for stiff hips of ankylosing spondylitis than the more formal arthroplasties. An operation like that advocated by Gruca can hardly ever have more than a limited application to a few bizarre deformations. The replacement of the femoral head by a plastic mould, as described by the Judets and by others, is still *sub judice* during more time for proper evaluation. It is difficult to believe that any material which does not eventually blend with its host will remain attached firmly for long, although, possibly, the junction of the bone and prosthesis is so close to the axis of movement that there is not sufficient strain to loosen the "new" femoral head. The published results have been most encouraging when the procedure has been used in treating ununited fractures of the neck of the femur in old people. Perhaps it will transpire that this operation, which imposes less strain on the patient than most other surgical procedures on the hip, has a place in the treatment of those with a short expectancy of life and grossly disabled by osteoarthritis or ununited fractures of the femoral neck. But it surely is unwise, to say no more, to subject young people with lesions capable—though admittedly not easily capable—of being dealt with by other means to this procedure while it is still in the relatively experimental stage.

A single hip soundly fused by bone in the neutral position allows reasonably good function. For stability there is no operation to touch it. But fusion is not always easy to achieve, and the long period of post-operative immobilisation in plaster of Paris makes for difficulty in mobilising the knee. It may be that operations fulfilling Brittain's compression principles are most likely to produce sound bony fusion. Many surgeons accustomed to the anatomical perfections of the anterior Smith-Peterson approach will be gratified to learn, from Kirkaldy-Willis's beautifully illustrated article in this number of the Journal, that ischio-femoral arthrodesis can be accomplished via this route. This article will assuage those who are unaccustomed to a posterior approach and also those who fear (some think groundlessly) for the safety of the sciatic nerve in Brittain's lateral approach, which he and his associates still employ with confidence and enviable competence. All of us who are disturbed by the difficult problem of the stiff knee following many weeks of immobilisation in a spica will hope that the Norwich V-arthrodesis, announced by Howard and Brittain at the recent meeting of the British Orthopaedic Association, will live up to its original promise of making immobilisation of the knee unnecessary after this operation.

The correct method of securing the best result in all children with congenital dislocation of the hip is still elusive—an observation confirmed by the depressing long-term results now reported by Platou after open reduction. Many questions still require answers. Does the "shelf" operation really do much more than produce an occasional satisfying radiograph? Is it possible that the magnificent anatomical and clinical studies, notably those of Putti and his colleagues, require repetition less than re-interpretation? It would seem that once again attention is being directed to the role of excessive anteversion of the femoral head and neck. "Rotation osteotomy" after closed or open reduction is perhaps an operation desirable more often than has yet been acknowledged in this country.

Reflection on hip-joint surgery suggests much that is worth emphasis. Since no single procedure can guarantee success, operations which so deform the upper end of the femur that future reconstructive surgery is impossible should be abandoned or reserved for exceptional circumstances. No procedure is completely satisfactory when it requires such rigorous post-operative splinting of the limb that movement of the knee is jeopardised. A stiff hip is little disability; a stiff hip *and knee* in the same limb are among the severest. Clearly, we must continue to strive for the ideal—a stable hip joint with a painless range of adequate movement. All will hope that the British Orthopaedic Association's ambitious investigation, with the help of a Nuffield Foundation Grant, into the results of arthroplasties performed in Great Britain will yield conclusions of value in the achievement of this ideal.

H. OSMOND-CLARKE.