A THREE-DIMENSIONAL SURGICAL FILM

An interesting feature of the Joint Annual Meeting of the British Medical Association and Irish Medical Association in Dublin was a three-dimensional colour film, with sound commentary, which was shown by courtesy of Ethicon Suture Laboratories, Ltd., Edinburgh. The film, which depicted a total gastrectomy for carcinoma done by a purely abdominal approach, was produced by the Worcester Film Corporation, of Worcester, Massachusetts, under the direction of Mr. Floyd A. Ramsdell, the inventor of a new camera and projector for three-dimensional technique.

The film was taken with a variable interocular camera which is said to have overcome the difficulties attending earlier attempts to make three-dimensional motion pictures. Formerly a single camera with beam-splitter was used, and this produced two images at each exposure of the film. When enlargement was attempted there was distortion of the image, which caused headache and nausea in some viewers. The present film was taken with a double camera system, and, by adjusting both the inter-lens distance and the angle between the two cameras, the makers have found it possible to reproduce more exactly the conditions of normal vision. The two separate films, for right eye and left eye, are then projected synchronously by a special projector on a single screen. Viewed with the unaided eye the screen image is blurred; but by the use of special polaroid spectacles, which separate the images for the individual eyes, a clear three-dimensional picture is seen.

The promoters claim that the film represents a notable advance in cinematographic technique, and this is certainly true, though one or two of those who saw the film in Dublin did find that watching it gave them a dull headache. It was quite clear that a remarkable technical effort lay behind the making of the film, but perhaps it may be questioned whether binocular vision is really so important to the proper appreciation of a film of a surgical operation. A series of really good "still" pictures by an artist remains one of the best ways of imparting a knowledge of surgical technique outside the operating theatre. Detailed planning, suitable close-up shots, careful and, if necessary, ruthless editing, and the interspersing of explanatory sketches all help to lift a surgical film out of the ordinary. The clarity of this particular film lost nothing by the closing of one eye despite, of course, the immediate loss of binocular vision, and the excellent view of the diaphragm was due to good lighting and a generally good technique. As a novel form of entertainment and instruction the film was most interesting, and its producers are to be congratulated on their pioneer efforts with a new method of visual education.

Reports of Societies

JOINT MEETING OF ORTHOPAEDIC ASSOCIATIONS

The Joint Meeting of the Orthopaedic Associations of the English-Speaking World, whose opening by the Queen Mother has already been noted (July 5, p. 37), was attended by members of the orthopaedic associations of America, Canada, Australia, New Zealand, South Africa, and Great Britain, as well as by representatives of other countries. The meeting lasted from June 30 to July 5, and was held in London. The following is a selective account of the scientific proceedings.

Disorders of the Hip

A number of communications on disorders of the hip-joint were given, and several of these dealt with the problems of traumatic dislocation. Mr. E. A. NICOLL (Mansfield) reported avascular necrosis of the femoral head in 10% of 144 cases. This complication he attributed chiefly to delayed reduction and early weight-bearing. Dr. MARCUS J. STEWART (Memphis) agreed about the former factor, but he did not think that the latter was of any real importance. The American speaker reported necrosis in 15.5% of cases treated by closed reduction, and in 40% of those operated upon. Mr. JAMES PATRICK (Glasgow) and Mr. NICOLL both emphasized the importance of distinguishing between avascular necrosis and osteoarthritis. In avascular necrosis symptoms preceded radiographic changes, and it always occurred within two years of injury, whereas arthritis developed more slowly.

Dr. FRANK STINCHFIELD (New York) reviewed a large series of cases of osteoarthritis of the hip treated by arthrodesis, mould arthroplasty, and Judet's operation. In the first group were 108 cases; pseudarthrosis had occurred in 22% despite a thorough technique. Low back pain and painful knee were other important sequelae in some cases. Those patients who had mould arthroplasty valued relief of pain more than preservation of movement, and the latter tended to decrease for several years after operation. The follow-up on the Judet operations had hardly been long enough to allow proper assessment. The indications for arthrodesis put forward by some speakers were held to be those for arthroplasty by others. An entirely new technique of arthrodesis was described by Mr. JOHN CHARNLEY (Manchester) in which a central dislocation of the hip was produced after reaming out the floor of the acetabulum.

In a discussion on treatment of the tuberculous hip the advantages of ischio-femoral arthrodesis were emphasized by Mr. THOMAS KING (Melbourne): this speaker and several others stated that adduction deformity should be allowed to occur in the early stages so that a shorter graft could be used, more stable fixation being achieved later. Most of the modifications in technique advocated by this speaker were in direct contradiction to the views of Brittain, who introduced the ischio-femoral arthrodesis.

Congenital dislocation of the hip-joint presents many thorny problems in older patients. Dr. PAUL COLONNA (Philadelphia) described his experiences with capsular arthroplasty, in which the best results had been achieved in those between 3 and 8 years of age. Adequate deepening of the acetabulum was essential, and excellent function with a good range of movement could be achieved in most patients. Dr. ALEXANDER GIBSON (Winnipeg) advocated a postero-lateral approach to the hip-joint, and described the technique he had used. In subsequent discussion several speakers, including Sir HARRY PLATT (Manchester), confessed to employing open reduction more frequently in recent years, but they emphasized that it should be done with considerable discretion. The problem of what to do, if anything, between the age of 8 years and adult life was still unsolved.

Spinal Injuries

The treatment of paraplegia resulting from thoraco-lumbar vertebral injuries was reviewed by Mr. F. HOLDSWORTH (Sheffield) in 68 cases, 47 of which had been treated from the time of injury. There had been no pressure sores in the latter cases, thanks to careful nursing and the avoidance of plaster fixation. An indwelling catheter with free drainage was, in his opinion, the best way of preventing urinary infection. The commonest site of vertebral injury causing paraplegia was at the level T 12 and L 1. At this level there was a mixture of cord injury and nerve-root damage, the extent of each of which could be quite easily determined at an early stage. The limitations of radiography in determining the stability or otherwise of the spine were well known; but in the event of instability he advocated internal fixation by metal plates, and Dr. PHILIP WILSON (New York) supported this view. The absence of bedsores and other serious complications in Mr. Holdsworth's own cases was paralleled by an average stay in hospital of 10 months; in those he had received second-hand, complications were frequent and the average stay in hospital was two years.