Andrew Wallace

Consultant Shoulder Surgeon, Fortius Clinic, London

Developments in shoulder arthroplasty

The last 15 years has seen tremendous progress in the art and science of shoulder arthroplasty. New knowledge of the biomechanics of the shoulder affected by trauma, arthritis and cuff deficiency, as well as advances in the engineering materials available for implant manufacture have driven the development of modular systems capable of finetuning the device to fit the patient, rather than the other way around. This lecture will briefly cover the history of shoulder prostheses, and the indications for partial joint replacement, hemiarthroplasty, anatomic total shoulder arthroplasty and reverse polarity arthroplasty. The principles lying behind patient selection, rehabilitation and the management of complications will be covered, as well as the longer term outcomes being reported from joint registries. Although the ideals of a lifelong implant that replicates the normal anatomy and provides for unlimited independent activity have yet to be realised, contemporary prosthetic joint replacement will still have an significant role in shoulder surgery until realistic and practical biologic alternatives become available in the future.