

## AN EXHIBITION OF 50 YEARS OF SURGERY: THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH

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To mark the fiftieth anniversary of the National Health Service (NHS), the Royal College of Surgeons mounted an exhibition which featured as part of the 1998 Festival Fringe and which will remain open from 2pm to 4pm every weekday for an indefinite period (entry via No. 6 Hill Square).

The exhibition consists of 15 items with well-designed display panels depicting different fields of surgery as they were in 1948 and as they are now.



Professor Williamson peruses one of the many informative display panels.

A brief history of the events leading up to the inception of the NHS is provided, culminating in the *Beveridge Report* of 1942, which was the basis on which the National Health Service was planned.

In many ways the Second World War set the scene for the NHS; public expectations were raised and people were determined to put behind them the years of depression with poverty and associated poor health. Many young doctors had their first taste of operative surgery in the Armed Services and were keen for further training and practical experience. The wartime Emergency Medical Service provided hospitals throughout the country and, although rather spartan and basic, these did provide adequate wards, X-ray departments, and operating theatres with some laboratory backup. They offered opportunities for rapid expansion of medical and surgical care on an unprecedented scale.

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Correct emphasis is placed upon the importance of patient-care prior to hospital admission and this has been achieved by the great improvements in the ambulance service, which can now offer a speedy response with resuscitation, life-saving measures and pain relief from highly-trained paramedical staff. Where serious accidents occur, on-site medical aid can be provided and many lives thereby can be saved.

The great advances in prevention and control of infection are emphasised. It is difficult for young doctors of today to realise the enormous benefits from the introduction of antibiotics; older Fellows will recollect the horrors of the old 'septic wards' which were a feature of earlier hospitals. The future potential threat from multiple drug-resistant micro-organisms is correctly emphasised.

One of the most evocative exhibits for me was in the anaesthesia section, where the anaesthetist's equipment for 1948 is displayed - two syringes with needles and a Schimmelbusch mask. The mask was used to hold the gauze pad onto which the liquid anaesthetic was dripped (often by a house officer straight out of medical school!) The discomfort caused by these procedures was often intense, and in total contrast to the smooth and comfortable modern anaesthetic with its complex monitoring of cardiovascular response, blood and fluid loss, etc.

The development of transplant surgery is fully illustrated, from the basic research of Medawar on tissue rejection to the first UK renal transplant in 1964 by Sir Michael Woodruff in the Royal Infirmary, Edinburgh. The exhibition also addresses future transplant prospects.

Laparoscopic (keyhole) surgery is dealt with in detail, with videos of several procedures and a mock-up of an abdominal operation in which visitors can try their hands at manipulating the instruments through the use of a visual display unit. Individuals vary enormously in their ability to use this technique, and it seems quite likely that some completely competent surgeons may never master this procedure. It is reassuring that measures are now available for training surgeons in laparoscopic surgery and assessment of their competence to practice it. Professor Sir Alfred Cushieri in Dundee

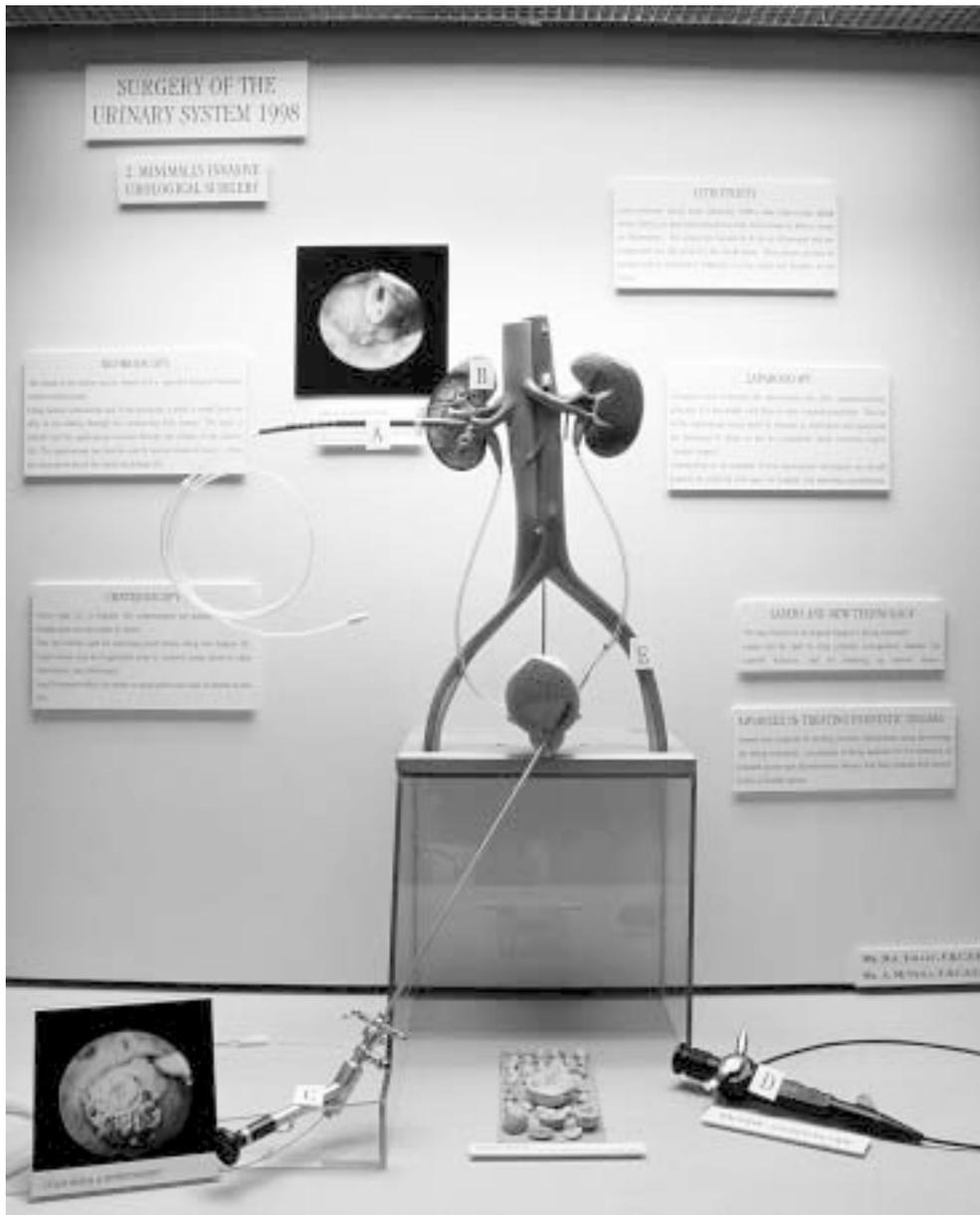


By using a visual display unit, visitors are able to simulate keyhole surgery.

is pre-eminent in this field and has provided much of the material in this section.

Eye surgery is another area in which great advances have been made. Younger doctors will not realise that in 1948 cataract operations were routinely followed by two weeks of bandaging of both eyes (often with serious ill-effects). Now patients are usually home on the day of the operation.

In urology, and ear, nose and throat surgery, great improvements have been made, often because of the availability of new technology, especially flexible endoscopes, fibre-optics and sophisticated new imaging techniques (CT and MRI scanning).



The urology display. Photograph courtesy of the Royal College of Surgeons of Edinburgh.

Vascular surgery has made notable advances with dramatic improvements in the treatment of aneurysms and arteries blocked by atherosclerosis. Less dramatic, but of benefit to huge numbers, have been the advances in treatment of varicose veins and associated chronic leg ulcers, which have often been the cause of great pain and disability in middle and old age.

Heart surgery started with the repair of valves damaged by rheumatic fever; with the advent of open-heart surgery, treatment for coronary artery disease became possible and also for serious congenital malformations. Cardiac transplant surgery is now practised widely and offers many years of worthwhile life to patients otherwise condemned to early death or prolonged severe disability and misery.

I was surprised to learn that orthopaedic surgery comprises 'more than half of the whole of surgery', but I am in no doubt about the benefits it brings to many patients. In my opinion, joint replacement surgery (especially to hips and knees) is especially advantageous in an ageing society such as modern Britain.

The exhibition concludes with a thoughtful contribution from Professor Adam Smith, *The Way Ahead*. He lists the challenges facing surgery and emphasises the need for wise counsel in coming to terms with the problems of ever-increasing demand on finite resources.

The need for first-class training for young surgeons is greater than ever before, and the difficulties in maintaining high standards will continue to increase. It is reassuring that the Edinburgh College of Surgeons is so active in these affairs, as is clearly demonstrated by this fine exhibition.

#### ACKNOWLEDGEMENTS

Help is gratefully acknowledged from Professor D.L. Gardner, Conservator of the Museum and from Mr David Wilson, Museum Assistant.