

FIRST EASTERN GENERAL HOSPITAL (TF) CAMBRIDGE

Ladies and Gentlemen, it is a great honour to be able to be with you inaugurating the memorial to the people who worked and were treated in the First Eastern General Hospital during WW1.

In its scale and devastation, WW1 was unlike any before. Artillery and machine guns damaged flesh and bone; and even if not killed outright, the mud and dirt of the trenches led to severely infected wounds. Millions died and even more were left disabled; in fact Maj Gen Sir William McPherson reported that 15% of all combatants in the British Armed Forces were killed – an unprecedented level when compared to previous conflicts.

It was perhaps the administrative achievements of the Allied forces which were especially brilliant and perhaps outshone the innovations which might be described as “clever, respectable, but not brilliant”. UK drew 11,000 medical practitioners as the medical facilities of the Allied nations expanded on an unprecedented scale. The work of Sir Alfred Keogh as DG Army Medical Services – brought back for a second term after the start of the war- had identified the need for large military hospitals if war broke out. This saw the establishment of 23 (later 25) TF General Hospitals which were shadows to come into operation on war declaration.

As the horrors of trench warfare quickly displayed themselves and aseptic routines became impossible, surgeons reverted to Listerian principles of antisepsis. New chemical solutions were invented (e.g. Edinburgh University Solution – EUSOL) and were coupled with debridement and drainage to improve wound management. Tetanus was prevented by prophylactic injections so successfully that its incidence immediately fell by 90%. Typhoid reduction was even more successful. Army Medical College officers became international leaders in treatment of infectious diseases.

Robert Jones along with his uncle Thomas recognised that femoral splinting reduced the incidence of infection and a mortality rate of 80%. The Thomas splint became part of everyday management and specialist fracture clinics were established to determine the surgery for complex bone and joint injuries. The splint use was to percolate into post-war general use as a first aid measure by ambulance services.

These orthopaedic advances were supported by X-rays – a rapidly advancing area which had only been discovered in 1895 - allowing better fracture visualisation and localisation of foreign bodies in the tissues.

The surgical records detail the ground breaking work of Dr Harold Gillies, the pioneering plastic surgeon who developed some of the world’s first successful skin grafts during the

Great War. He developed early plastic surgery techniques to treat seriously wounded and disfigured soldiers, allowing them to go on to live a full life as civilians.

Blood transfusion was tentatively used at the First Battle of Cambrai in 1917, with prepared citrated blood being sent up in Field Ambulances in the allied advance in 1918 – being safely kept for 12-18 hours.

The effects of chemical warfare and particularly gassing led to enhanced studies in respiratory physiology, however, proportionately the casualties were not excessive: 3% fatal and 2% permanently invalided – with 70% fit for duty after 6 weeks. The fear was a greater debilitator perhaps.

I think I have shown that WW1 advanced medical treatments in response to new and horrific wounds and injuries. In 1915, a Government actuary estimated that 12% of soldiers at the Front would be permanently disabled – 240,000 wholly or partially maimed. Whether the figures are accurate is difficult to determine, but, importantly, by the second year of the war the problem was realised and measures taken. “We must take as much trouble to find a man a job when his regiment throws him up as we did to find him a regiment when he threw up his job”.

The research and advances have to be seen in relation to medical practices of the time. Some, in this day, may seem bizarre or even dangerous. However, the medical and nursing staffs of the time were keen to find new treatment methods to deal with the complexities of war. Some would remain in practice in the post-war era (Thomas splints); others would take some time and a second war to advance further (blood transfusion); other concepts never advanced despite political intent. (The introduction of Health Centres bringing preventative and curative medicine together was a proposition – these being staffed by General Practitioners with a limited number of beds and laboratory facilities would resemble the “Casualty Clearing Station” and although they would have consultant advice, the main working area of specialists would be in the secondary health care hospital. An integration of GP’s with consultants and preventative medicine with curative. It was too soon for such change and was thrown out till much later in the 20th Century).

The wartime experiences of surgical staff led to an awareness of parochialism, and consultants wished to experience how their colleagues were advancing medicine, not just in UK, but also internationally. Under the auspices of Lord Moynihan several travelling surgical clubs were established and continue into the present day to allow exposure to surgical practice around UK, Europe and now further abroad.

The war was over and the majority of the Army Medical Corps and Queen Alexandria’s Imperial Nursing Service were demobilised. The Territorial Force Hospitals closed and priorities changed. Without the pressures of war, the need for effective and advancing military medicine faded. It has always been so from the time of Crimea to the present day –

a fluctuating sinusoidal graph of military medicine shows great peaks during warfare and great troughs in peacetime. Lessons learned need to be re-identified at the beginning of every campaign and equipment has not necessarily kept up with technical advances. We see this even to the present day, where the staff in a Field unit in Korea, would have not seen much real change in the Falklands in 1982.

However, the present campaigns in Iraq and Afghanistan have greatly advanced military medicine and many of these have been adopted in civilian practice – resuscitation policies, helicopter evacuation, understanding of coagulopathy, tourniquet use and rehabilitation with very advanced prosthesis are but a few. We now owe it to our patients to maintain these advancements, prevent reduction in medical capability and ensure that we are at least as able at the beginning of the next campaign as we were at the end of the last.

To the staff of the First Eastern General Hospital, I thank them for their dedicated work in their open-air wards. I thank them on behalf of the thousands of patients who benefited from their dedication and hard work. Finally, I thank the people of Cambridge and particularly Clare College who through this ceremony are remembering their commitment.

Alasdair Walker