

The contributions of Sir Archibald McIndoe to burns treatment

The ravages of burns wounds sustained in conflict have afflicted mankind ever since the offensive capabilities of fire were recognised, and it will come as no surprise to anybody that burns continue to present, with devastating consequences, in modern day theatres of war. While the aetiologies may be different, the well-documented psychological effects of burns wounds are as real as they ever have been (Patterson et al, 1993). Indeed, “as the technology of weaponry advances, the number and severity of burn injuries will certainly increase” (Atiyeh et al, 2007). Given Britain’s current involvement in various conflicts worldwide, it is appropriate to review the revolutionary surgical and rehabilitative contributions made by Sir Archibald McIndoe.

Born in New Zealand in 1900, McIndoe achieved success in abdominal surgery at the Mayo Clinic, and latterly, the Hospital for Tropical Diseases (Matthews, 1967), before being appointed Civilian Consultant to the RAF in 1938. At the outbreak of World War II (WWII), McIndoe’s role became that of consultant plastic surgeon to the RAF in East Grinstead, as one of only four plastic surgeons in the entire country (Blond McIndoe Research Foundation, 2013).

McIndoe observed that the existing burns treatment of tannic acid and jelly hindered and protracted the healing process (Blond McIndoe Research Foundation, 2013), so he elected to operate immediately, removing burnt tissue by sharp debridement, and use grafts to replace the damaged skin. This initiated the healing process far quicker than the previous approach, wherein the airmen waited in agony for the acid to dry the skin out sufficiently for it to be removed. McIndoe was so convinced of the efficacy of debridement and grafting that he fought “bitterly and mercilessly to secure the abolition of the use of tannic acid” (Davies, 1977).

The public view of injured service personnel in the present day is perhaps more understanding than it once was; thanks to the 24-hour media coverage of the internet age we know where our armed forces serve, the enemy they are fighting, and the injuries they sustain. In WWII, airmen who had suffered severe burns were severely disfigured, and



Archibald Hector McIndoe pioneered the treatment of burns victims during World War II, revolutionising the field of plastic surgery.

had to deal with an ignorant, unprepared public, which compounded the mental anguish of their recuperation from life-threatening trauma. As such, McIndoe placed great importance on the rehabilitation of the airmen, encouraging them to wear their uniform as a display of pride and solidarity, both in the hospital, and out in the local community. Such was the cutting-edge nature of the treatment received, and the beer-drinking social camaraderie that McIndoe fostered, that patients from East Grinstead famously came to be known as the ‘Guinea Pig Club’.

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EDWARD WHITE
Freelance Medical Writer,
British Columbia, Canada