MAXILLOFACIAL SERVICES IN THE TERRITORIAL ARMY

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The Roman army had a well-organised medical service attached to each legion but for more than a millennium after they left Britain the medical help given to soldiers was generally basic in nature and patchy in distribution. On the restoration of the monarchy in 1660 a small standing army was formed and an army medical service created. Surgeons were in general on the same footing as drummer boys and very few were commissioned. During the Peninsular War some progress was made in providing for battle casualties but it was the scandalous conditions in the Crimean War which brought about change, to both medical and nursing services. The Medical Staff Corps was formed in 1855 composed of 'Men able to read and write, of regular steady habits and good temper and of a kindly disposition'. The title was changed in 1898 to the Royal Army Medical Corps (RAMC) and the medical services were soon tested in the Boer War when they dealt with 22,000 wounded and 74,000 sick with dysentery and typhoid. The nursing services had been reformed by Florence Nightingale and the Queen Alexandra Nursing Corps (QARANC) was formed in 1902 from the Army Nursing Service. Dentists were deployed in the army for the first time in South Africa during the conflict as the dental health of the soldiers was so bad that they had difficulty eating the tough beef and hard biscuits. The Army Dental Corps, later the Royal Army Dental Corps (RAD), was not formed until 1921.

The First World War resulted in a massive increase in the size of the armed forces and a parallel development of medical services. A Territorial Force, later the Territorial Army (TA), had been formed in 1908 to supplement the regular army in time of war and there is an account of one unit going to annual camp in 1914 and returning four years later. At the start of the war most of the transport was horse-drawn and the organisation was based on a chain of evacuation with the wounded being passed rearward through the regimental aid post (RAP), dressing stations, casualty clearing station and main hospitals at Boulogne, whence some were shipped to England. Later the casualty clearing stations were expanded to form hospitals so that treatment could be provided nearer to the front line. The injuries and illnesses encountered in the heavy bombardments and muddy conditions of the trenches produced heavily-infected wounds with resultant high morbidity and mortality. In particular, the use of trenches resulted in there being a high incidence of head and facial wounds, of which there was little surgical experience.

Maxillofacial surgery was pioneered by a Frenchman called Valadier who became a naturalised American, qualified in dentistry in Philadelphia and practised in Paris. On the outbreak of war he joined the British Red Cross and was sent to Abbeville where he arrived in his Rolls Royce and was attached to the RAMC in the 13th General Hospital. In 1914 he established a fifty-bed unit for the treatment of facial injuries. One of his associates was a ENT surgeon called Harold Gillies who, later, was a pioneer of plastic surgery and set up a facial injury unit with the dentally-qualified Kelsey Fry. The development of dental and maxillofacial services was probably assisted when General Haigh needed urgent dental treatment during a battle in 1914. He was probably treated by Valadier as there were no available British dentists; the War Office immediately ordered the dispatch of several dentists to the front and Haigh later recommended Valadier for a decoration saying 'I cannot speak too highly of the excellent and most valuable work on the jaw performed gratuitously by this gentleman for all ranks of the British Army'.

The development of dental and maxillofacial services was probably assisted when General Haigh needed urgent dental treatment during a battle in 1914.

Figure 1 Patient with extensive facial injuries following a gunshot

The TA was maintained in the interwar years and a number of specialists in maxillofacial surgery held commissions in medical units. One particular doubly-qualified person was Robert Sutton Taylor who founded the Oral Surgery Club of Great Britain. By 1938 the medical services were again expanding and during the Second World War surgical units were engaged in many theatres of combat. Although the basic chains of evacuation were the same, the improved manoeuvrability of armies resulted in greater isolation of some hospitals and specialist teams would be moved from
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one to another to perform surgery. In the North African arena specialist teams were formed to treat head injuries and the mortality rate for brain injuries, which in 1918 had been forty percent, dropped to fifteen percent. At the start of the desert war, casualties had to be moved up to 350 miles to receive surgery and so Field Surgical Units (FSUs) were formed which were very mobile. One such unit was visited by Rommel by mistake but he was taken to be a Polish general and shown round before being saluted off the base. Medical units were sent to Greece and my predecessor at Royal Lancaster Infirmary, Eric Cooper, was captured in Crete and spent the rest of the war in Colditz. The deployment of FSUs formed the pattern for the rest of the war in Europe and medical units were transported in gliders on D-day and included one dental officer for every 3,000 troops. Some were also integrated into maxillofacial teams. Since the end of the Second World War mobile surgical teams have been retained but the increasing availability of air transport has allowed the rapid evacuation of casualties to hospitals further behind the lines for definitive treatment. This is only possible if there is control of the skies for the use of either fixed-winged planes or helicopters. The regular forces were supplemented for some years by National Servicemen while the TA would only be called out in a time of major conflict. The main threat was from the Soviet Union in western Europe and the British Army was designated a sector of the front line in Germany with supply lines stretching back to the Channel. Maxillofacial FSTs were formed and in time of war would join field hospitals in secret locations near the Belgian border well behind the front line. One of these was the TA 374 maxillofacial field surgical team which contained anaesthetists, nurses, dentists, a dental technician, several supporting other ranks and three maxillofacial surgeons. As the unit was small it trained with a TA field hospital and had a reduced commitment of a two-week camp and two weekends each year. One camp every three years was held on the continent, usually in Germany, and involved the unit being part of a large military exercise during which a hospital was set up in the field and volunteer casualties were processed through the complex. After the demise of the Soviet Union the armed forces' role was changed and the type of warfare altered to smaller conflicts as seen in the Balkans. Several units were merged to form a head and neck team which included neurosurgery and ophthalmology, with the likelihood that only parts of the team would be deployed in one location, although recently a further change has resulted in the formation of two separate maxillofacial teams. The Ministry of Defence is at present encountering problems in the recruitment of surgeons and anaesthetists into the TA even though the terms of service have been made more flexible.

The speciality of maxillofacial surgery had its origins during the two world wars in the treatment of facial injuries and has steadily developed in civilian practice in the following decades. Although battlefield trauma is not at present creating many casualties for this country, the situation could easily change rapidly in the future and trained staff would be needed.

**FURTHER READING**

McLaughlin R The Royal Army Medical Corps Leo Cooper Ltd 1972

Ward VH Dentists at war Minerva Press 1996