The truth from the trenches

In this three part series Dental Tribune’s Laura Hatton explores the forgotten history of the dentist’s role during World War I

The beginning of this research began with a remarkable conversation with a gentleman named Richard Fowler, who enlightened me about a close family friend and a noteworthy dentist, Sir Harry Baldwin. Being the godson of Sir Harry Baldwin’s only child, Mary Baldwin, Richard was able to reveal the intriguing story of Sir Harry, which captured my imagination. Born in 1862 into a family of drapers in Nottingham, Harry developed a passion for dentistry and after qualifying in 1884 he became acquainted with Sir Charles Tomes, and worked alongside him at the Cavendish Square Practice for many years. In 1915 Harry became President of the Metropolitan Branch of the British Dental Association (BDA), and in 1915 was appointed President of the Section of Ondontology. Harry’s later life was intertwined with various connections to the Royal Family, becoming dentist and surgeon dentist to Queen Victoria and King George V, and as will be uncovered in the second part of this series, he was a favourite of Queen Mary.

Richard had heard the stories, held the mouth casts of Queen Victoria, and what began as a history of an astonishing Victorian gentleman who had introduced Plaster-of-Paris to Britain and created the amalgam filling, turned into a remarkable story with a historical climax. Together, with the help of Richard and the archive material which he donated to King’s College London, the story of Sir Harry Baldwin unfolds in the midst of World War I, where his role in society arguably changed dentistry forever…

At the beginning of World War I no specialist hospitals existed for soldiers who had received facial injuries whilst fighting on the front line and it became clear that these men desperately required experts to attend to their injuries. Although such hospitals were set up in France, Britain had not followed suit and it was to take months of perilous travel and detailed documentation before serious action was to be taken. The milestone began on the morning of December 31st 1915 in a military hospital on the front line in France; when a gentleman of fair hair and a 5ft 9in build walked into one of the largest rooms of a military hospital in France; Hospital Dentaire de Paris. Even with his dental knowledge and 53 years of life experience behind him, nothing was going to prepare him for the scenes that lay before his eyes: the gentleman, Harry Baldwin, was about to witness some of the most extensive jaw cases of the Great War.

As Harry walked through the room hundreds of soldiers lay before him; many of these men, some barely old enough to be enlisted, had extensive loss of tissue in the lower part of their face. Harry spent the morning observing and documenting the degree of shrapnel damage that had maimed and disfigured the soldiers, noting how all the cases needed complex levels of reconstructive treatment. However, it wasn’t until Harry found himself observing a false eye surgically enclosed into the flesh of a piece of cheek that he realised that this was no ordinary hospital: the era of reconstructive surgery had commenced.

War injuries

On 3rd January 1916 in Lyon, Harry’s perception on the treatment of jaw cases was significantly altered. He had spent the last few days witnessing horrific scenes and facial injuries at the Hospital Dentaire de Paris and had worked alongside Dr Frey at the Val-de-Grâce, however his journey was to lead him to the hospital Service de Stomatologie de Lyon, in the presence of surgeon dentist Dr Pont. Recording every step, Harry watched in fascination as Dr Pont attended to an officer that had suffered what had been classified as a “war injury to the jaw”.

To clarify what was commonly labelled as “war injuries to the jaw” I will refer to a speech that Harry made on his return to Britain: The term was implied to those who had suffered severe injuries of the maxillae, or in other words, wounds that had been caused by bullets, pieces of shell, or bombs striking the bone at high velocity.”The effect of these impacts”, Harry explained, “is to comminute the bone and generally destroy or completely carry away some sector of it. Pieces detached, and likewise teeth, frequently have so great a proportion of the moment. The bone and teeth embedment; Type 6 referred to cases with two or more fractures with loss of substance (this level of injury was usually caused by a shell); Type 5 were gunshot wounds to the maxilla that had caused complications, such as possible haemorrhage and teeth embedment; Type 6 cases were the most severe injuries and as Harry explained, the most distressing of cases (in these instances most of the anterior portion or more of the bone and soft tissues had been “carried away”).

The Service de Stomatologie de Lyon was one of the first in France, accommodating 850 cases, which were assembled in six large hospitals; five other hospitals were annexed to the central hospital, Hôpital de Stomatologie et Prothèse Bucco-Faciale. One of these hospitals was reserved for jaw injuries that had been complicated by sinus and ear wounds, whilst the others were put under the effect of ethyl chloride (a form of anaesthetic that had proved popular during the War). Harry recorded the procedure in detail:

“The soldier on this particular afternoon had suffered a Type 4 injury, and with his fate in the hands of the dental surgeon, the soldier was put under the effect of ethyl chloride (a form of anaesthetic that had proved popular during the War). Harry recorded the procedure in detail:

“The appearance of the patient is often ghastly, mastication is impossible, speech is very difficult, and when the chin and symphysis are gone there can be no control of the saliva…”

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until the point of the chin, the other a fragment about an inch wide through the whole...of the jaw and containing two teeth – one wisdom tooth – there Dr Pont said, unfortunately were dead – the soft tissues were then divided by completely splitting up the sinus, which was under the chin, and a clay of kind was soaked in — of iodine and packed into it. Bandages were then applied to the fracture."

In the beginning
It became obvious to Harry that hospitals such as this were a necessity to the survival of soldiers during the war and on querying the situation further he was invited to read the hospital’s first annual report. The Hospital Service de Stomatologic de Lyon begun in September 1914 as an ambulance of 50 beds, which was located in the presence of a school and strictly reserved for wounds of the face. Scarceley had it been created was it perceived as insufficient to support the number of wounded men that were being sent from the front line. By 1915 the total number of wounded men that had been seen and on January 15th 1916 Harry received a letter from Norman Bennet stating he accepted the idea of dental hospitals, and that it would not be impossible to create them; he went on to confirm that Harry’s concerns would be pressed upon Surgeon-General Rusell at the War Office, as he was the man “who was really responsible for dental and jaw treatment in the Army.” Mr Bennet further mentioned how a French correspondent had declared that the majority of the dental profession in France was to be utilised in dental work for the Army. For Harry this information was invaluable and was soon to become the backbone of his campaign.

Rewriting history
On his return to Britain Harry had come equipped with enough evidence to launch an appeal to create stomatological hospitals in every district in Britain. His message amplified how such hospitals offered a chance for those soldiers who had become mutilated wrecks to return to society as men presentable and happy, and not as objects of horror and commiseration.

In one of his earliest speeches on his return, Harry related how the failure to create a stomatological service early in the war had resulted in soldiers coming back to the hospital, with their mouths sewn up and distorted; many of them had the soft tissues were then divided by completely splitting up the sinus, which was under the chin, and a clay of kind was soaked in — of iodine and packed into it. Bandages were then applied to the fracture.

The hospital was surrounded by a large garden where the wounded would spend time recovering before being sent to the centre of the Service, Auxiliary Hospital No. 19, where the soldiers would be attended to by dental surgeons.

Between December 1914 to December 1915, 574 splinter extractions were carried out, along with 92 extractions of missiles and 90 plastic operations, not to mention a whole array of operations including the 18,854 extractions, 722 scalings, 5,186, 1,779 plates (artificial teeth), and 25 metallic chin caps. There were 947 recorded apparatus for the retention of fragments of jaw, 674 apparatus for the reduction of displacements...
difficulty speaking, and there were numerous fractured jaws. He confidently stated in several of his speeches that any form of work on the jaw and face should be undertaken by dentists, and not by doctors. In a lengthy and detailed debate, Harry emphasised on the evidence of surgical failures carried out by doctors, and exclaimed that: “One has seen cases where useful teeth with live pulps have been extracted, whilst septic roots have been allowed to remain. In other instances the soft parts have been sewn up around bony fragments which were still displaced...”

Harry continued voicing his knowledge, sharing his message that if France was doing it then so should Britain:

“I suggest that all is not being done in this country which should be done for soldiers wounded in the jaws and face; and in order to assist matters I also venture to suggest that a Care Committee for soldiers wounded in the jaws and face should be formed, the object of which Committee would be to promote the interests of such cases not only whilst still in the Army, but also after their discharge.”

Harry continued his campaign. Aspiring to work the heart strings of compassion by exercising hard felt shock tactics, Harry delivered a presentation of the wounded soldiers; the exhibition was filled with photographs and models of various cases.

Harry’s voice had reached the masses and his efforts hadn’t gone unnoticed. Although his words had been heard, the story of the dental surgeons and the Order of St. John of Jerusalem in England, Parliament and the Joint War Committee, King George V personally granted permission for Harry Baldwin and his fellow dentist, Dr Hern, to visit the military hospitals in France with provisions and services to be provided at their every need. Orders were written to the military hospitals of France and Britain; however, having read a selection of cases documented by Sir Harold Gillies, (the doctor who pioneered plastic surgery), it becomes apparent that the strength of each dental surgeon mustered from within during the Great War was an incredible accomplishment and deserves, with a shadow of a doubt, the utmost respect and honour, and a recognised place in history.

Harry argued his case and articulated his passion and determination into words of reason; what followed was a dedicated committee and an influx of maxilla facial hospitals.

Making history
On 29th February 1916 Harry made a proposal for a ‘Care Committee for Soldiers Wounded in the Jaws and Face’. His voice travelled fast and on the 2nd March 1916 The Times newspaper ran a headline Dentistry in War: Special Hospital Needed in London. It was here that the story of the role of the dentist was revealed to the public eye, describing the scene that existed before the dental surgeons: “The jaw may be broken, a piece of bone may have actually smashed out of it. The loss of that piece of bone, that tooth socket, can only have one result if left untreated – deformity of a permanent character. Many of these cases are now in existence... At present this work is being done gratuitously by the consulting dental surgeons.”

With the media behind him, Harry’s voice had reached the masses and his efforts hadn’t gone unnoticed.

On the 10th April 1916, after much communication between Harry, the British Red Cross Society and the Order of St. John of General commanding the line of communications in France and on 18th April 1916 the request was accepted. Travelling on board the Special Service Cross Channel Boats they travelled across the channel, with no incidents, no bombs and no mines to report. Harry’s post was to study the conditions under which jaw cases were being treated and how methods were adopted; the information brought back to the King would change the way Britain saw dentistry forever.

“I suggest that all is not being done in this country which should be done for soldiers wounded in the jaws and face”

On 19th November 1916, regarding the outlook of the war, Harry wrote to Mr Goschen on the 20th November 1916 concerning the idea of freeing up the military hospitals on the front line by sending soldiers to specialist dental military hospitals.

Harry argued his case and articulated his passion and determination into words of reason; what followed was a dedicated committee and an influx of maxilla facial hospitals.

A place in history
In 1918 Harry, along with many of the dental surgeons and dentists that treated thousands of wounded soldiers, was knighted for his services during the war.

It may be hard to truly imagine the haunting images that were set before Harry’s eyes throughout his time spent in the military hospitals of France and Britain; however, having read a selection of cases documented by Sir Harold Gillies, (the doctor who pioneered plastic surgery), it becomes apparent that the strength of each dental surgeon mustered from within during the Great War was an incredible accomplishment and deserves, with a shadow of a doubt, the utmost respect and honour, and a recognised place in history.

I would like to thank Richard Fowler for giving me the opportunity to write this article and for the resources that he donated to King’s College London. I would also like to thank the staff at the Archive Department at King’s College London for their help and guidance whilst completing my research.