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 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 beginning of this research (this tended to cause a loss of articulation); Type 5 were single fractures with vertical displacement; Type 4 were 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 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 maxilla, 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 sectors of it. Pieces detached, and likewise teeth, frequently have so great a proportion of the moment of the bullet imparted to them that they themselves act like projectiles and tear through the soft tissues in a radiating manner, inflicting very large flesh wounds.”

Harry devised how such injuries could be classified into six sections or types, determining the true extent of the damage and the treatment that would be best suited for treatment. Type 1 wounds were fractures of the jaw caused by a gunshot wound where there was no disarrangement in the line of teeth; Type 2 were single fractures of the mandible with lateral displacement (this tended to cause 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…)

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:

“Dr Pont used a shankspoon in the pocket of a sinus and eventually scraped out the fragment of shell and two longish pieces of bone – one unpleas-

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By the point of the chin, the other a fragment about an inch wide through the whole…of the jaw and containing two teeth – one a 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 iodoine 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 30 beds, which was located in the presence of a school and strictly reserved for wounded men that it became invaluable and was soon to become the backbone of his campaign.

Harry realised the momentous role that the hospital was performing and on his return to Britain he began writing letters to various people. His words painted a clear image of what he had seen and on January 15th 1916 Harry received a letter from Norman Bennet stating he accepted the idea of dental surgeons. "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 stomological 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 stomological 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

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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 which became a subject too vast to undertake in one sitting. Having seen an abundance of horrific facial injuries that had been skillfully repaired beyond belief, all Harry could do was wait and hope that his words had been listened to.

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 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 each dental surgeon mustered from within during the Great War was an incredible accomplishment and deserves, without a shadow of a doubt, the utmost respect and honour, and a recognised place in history.

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

In his letter Harry described the insufficient flow of men being discharged from the front line hospitals and proposed 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 France. The Times, courtesy of King’s College London

Print out of three sketches from Harry’s diary, courtesy of King’s College London

Sauf-conduit (Harry’s pass to travel into France), courtesy of King’s College London

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.

Although Harry’s diary is still currently being transcribed, what can be devised from his notes is that Harry continued visiting the hospitals in France, taking notes and recording treatments and cases in his diary. His sketches dictate the level of expertise and science that captivated the dentists of the time; pages upon pages of Harry’s diary are dedicated to drawings of the equipment used, sketches of clamps and hinges that attached jaws back together, case studies of jaws with chunks of bone missing, teeth askew and fractured jawbones, all of which were accompanied by an idea of treatment.

Alleviating pressures
As a final act of his campaign, Harry wrote to Mr Goschen on the 20th November 1915 regarding the outlook of one of the hospitals in France. In his letter Harry described the insufficient flow of men being discharged from the front line hospitals and proposed the idea of freeing up the military hospitals on the front line by sending soldiers to specialist dental military hospitals.