

ANZAC SURGEONS OF GALLIPOLI

The Great War began at the end of July 1914 with the Triple Entente (Britain, France and Russia) aligned against the Triple Alliance (Germany, Austria-Hungary and Italy). By December, the Alliance powers had been joined by the Ottoman Turks; and in January 1915 the Russians, pressured by German and Turkish forces in the Caucasus, asked the British to open up another front.



Hamilton second from right:
There is nothing certain about war
except that one side won't win.
AWM H10350

A naval campaign against Turkey was devised by the British Secretary of State for War Lord Kitchener and the First Sea Lord, Winston Churchill.

It was intended that allied ships would destroy Turkish fortifications and open up the Straits of the Dardanelles, thus enabling the capture of Constantinople.

It was intended that allied ships would destroy Turkish fortifications

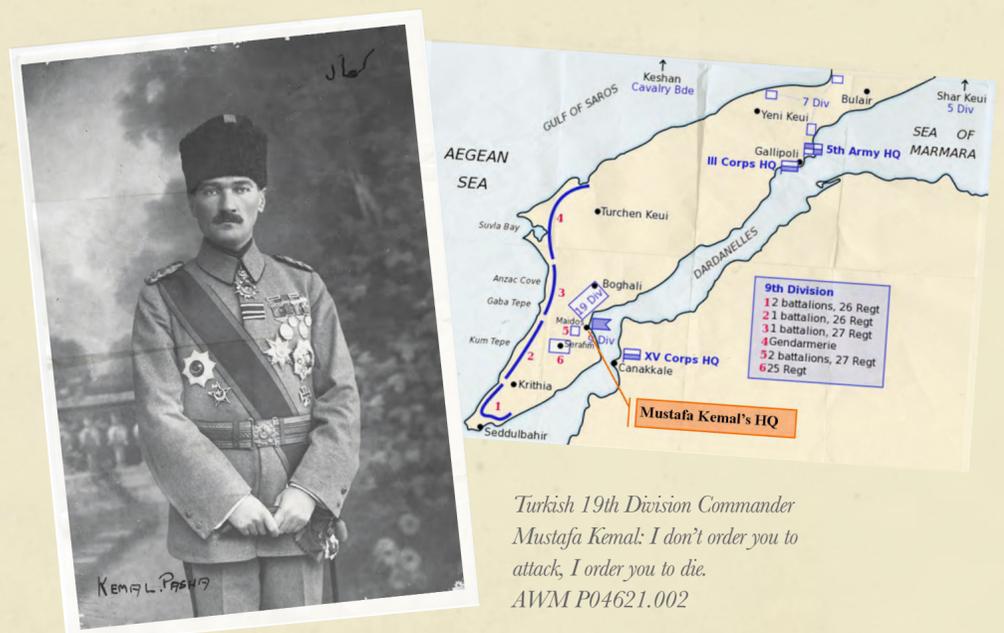
However, by the 18th March, with the loss of three capital ships including *HMS Irresistible*, it was clear that the naval campaign had failed.

The next step was a military campaign involving the Mediterranean Expeditionary Force consisting of around 78,000 troops from Australia, New Zealand, Britain, India and France. It was commanded by Lord Kitchener's protégé, General Ian Hamilton.

The Turkish forces

In 1913, Enver Pasha became Minister of War and de-facto Commander in Chief of the Turkish forces. He commanded the Ottoman Army in 1914 when they were defeated by the Russians at the Battle of Sarikamış and also forged the alliance with Germany in 1914. In March 1915 he handed over control of the Ottoman 5th army to the German General Otto Liman von Sanders.

Von Sanders recognised the allies could not take Constantinople without a combined land and sea attack. In his account of the campaign, he commented on the small force of 60,000 men under his command but noted: *The British gave me four weeks before their great landing.*



Turkish 19th Division Commander Mustafa Kemal: I don't order you to attack, I order you to die.
AWM P04621.002

ALLIED MEDICAL ARRANGEMENTS



TURKISH MEDICAL ARRANGEMENTS



Çanakkale General Hospital



Hospital at Gallipoli

*Photos:
Harvey Broadbent*

During the Gallipoli campaign, the Ottoman Red Crescent organisation (Hilal-i-Ahmer) liaised with the Ottoman Army medical units. Medical students from the Darulfünan Medical School were conscripted and sent to various medical units. And a number of German and Austrian doctors, nurses and orderlies worked in Turkish hospitals.

Like the allies the Turks had difficulty establishing hospitals in the rugged terrain. They had...*one main field hospital with a few medical stations converted from tea houses as a feeder line to cater for the wounded.*

The slightly injured were dressed and returned to their units but the seriously wounded were sent (often in carts lent by civilians) to the larger Field Hospitals located well away from the front. These included the hospital at Gelibolu (Gallipoli town), supervised by the eminent Ottoman surgeon, Dr Talha Bey.

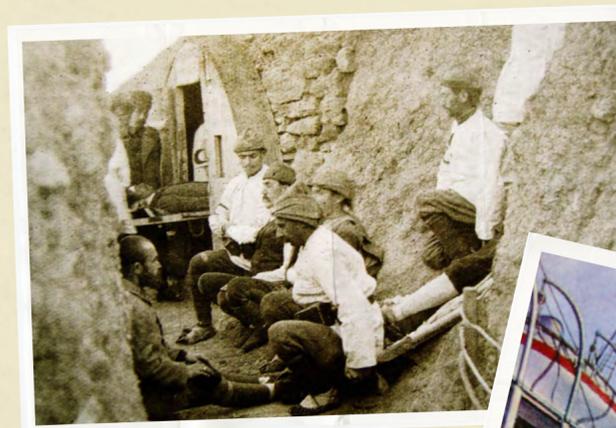
In the Field

Arrangements on the battlefield were similar to the allied medical structure. The wounded were carried by orderlies to the casualty area at the rear of the trench lines where their injuries were assessed.

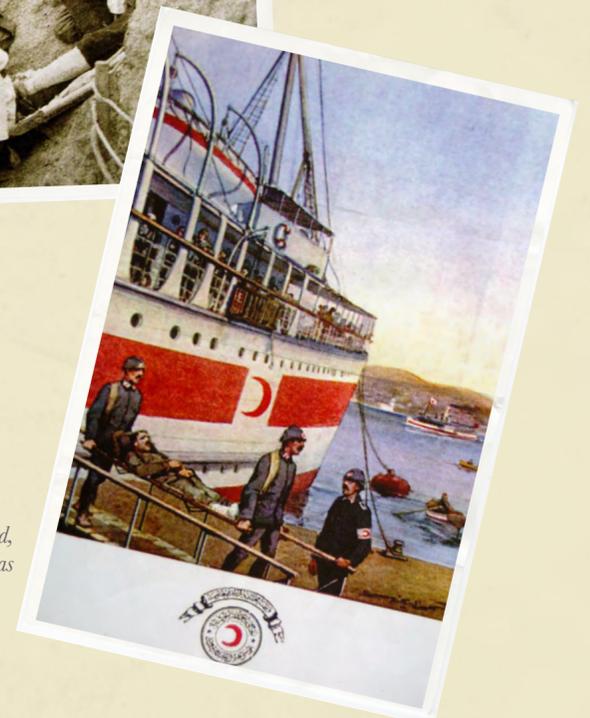
Dressing stations were located at Cape Helles and at Kocadere and Matikdere behind the third ridge at Anzac. These stations treated both the sick and wounded and performed some primary surgical procedures. The Turkish forces had difficulty coping with the unexpectedly large numbers of wounded, faced water shortages and were often short of basic medical supplies such as iodine.

Brandl [Vice-Sergeant Major of the Bavarian Light Cavalry] who had studied medicine for six terms in Munich, found a bullet wound in the middle of the breast, close to the heart, and tied me up with a field dressing... They laid me on a stretcher, already heavily soaked in Turkish blood, and carried me down the steep hill...

General Hans Kanengiesser



Battlefield First aid post

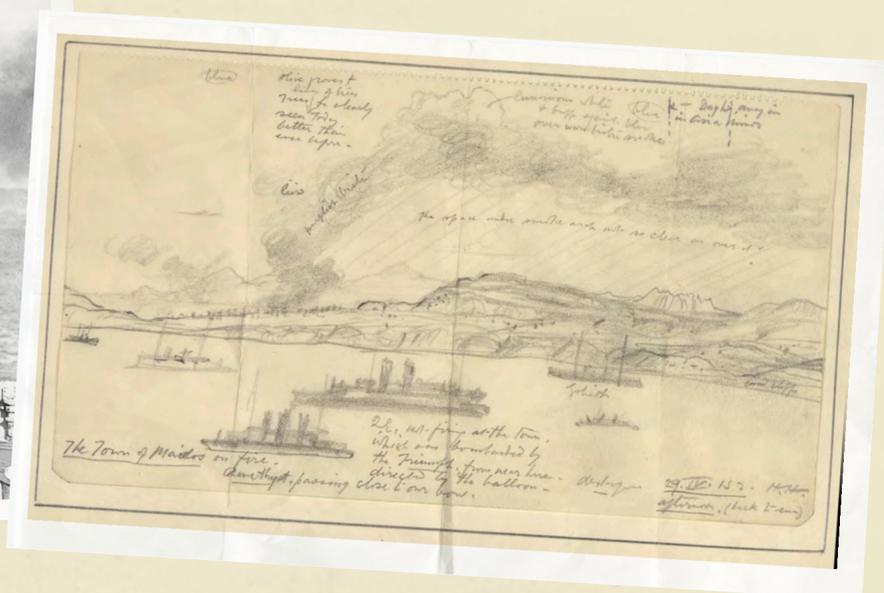


*Red Crescent postcard,
possibly of Akbas*

THE BOMBING OF MAIDOS



AWM G00229



IWM 4291 Bombing of Maidos, drawing by Herbert Hillier

Bombarded by allied ships on the 29th April 1915, the Turkish town of Maidos suffered extensive damage and its hospital housing 2500 patients was partially destroyed:

Yesterday the enemy bombarded heavily from the Strait Bay to Maidos, in which thousands of innocent and helpless people live, and the first shells hit the military hospital that flies the Red Crescent flag and caused the death of hundreds of helpless patients and the numbers are not known yet but it is guessed that more than a few hundred offspring [sic] perished.

Considering that the hospital is at the West side and out of town, this attack happened by design and is an inhuman act...

This attack and later bombings of other Turkish hospitals meant that the Turks could not rely on Red Crescent markings as a protection against artillery fire.



THE LANDINGS AT GALLIPOLI

25th APRIL 1915



*Beach at Anzac Cove
AWM PS1659*

The carnage at the Gallipoli landings is well documented. Although numerically inferior, the Turkish forces had a strategic advantage and were well entrenched in positions above the landing beaches. As indicated by the Dardanelles Commission of 1917, plans for the campaign had grossly underestimated the number of wounded and the medical arrangements proved to be inadequate.

First Landings

The beach at Anzac was only a cricket pitch in depth, the steep face of the shrub covered hills springing straight up from its landward edge. On the 25th April the commanders of the medical units landed first and Colonel Neville Howse, who was ADMS of the 1st Australian Division was on the beach at 7am. He took personal charge of the evacuation of the wounded men crowding the beach at Gallipoli and 1500 casualties were evacuated on that day.



*Razorback at Table Top looking west
AWM G01829*

...plans for the campaign had grossly underestimated the number of wounded and the medical arrangements proved to be inadequate.

THE LANDINGS AT GALLIPOLI

25th APRIL 1915



AWM 05763 1
1 ACCS on beach at Anzac

The 1st Australian Casualty Clearing station was set up under cliffs at the southern end of the beach. Commanded by Wilfrid Giblin, this unit with only 5 doctors and 60 orderlies was inundated with 700 casualties on the first day.

Neville Howse noted: *[Giblin's unit]...worked continuously for 48 hours with zeal and efficiency under the very worst conditions owing to the limited space available. They performed a number of emergency operations and carried out a rapid evacuation of the sick which was essential.*

John Corbin, a South Australian surgeon graphically described the approach to Anzac and remarked on the apparent chaos on the beach:

It was not disorder really; everyone was doing his job. But it was so cramped... During the first four days, 3,300 wounded passed through our hands. We gave up recording them, as our only book was filled up on the first day and simply counted them... During this time all urgent operations were done including necessary amputations, tying of arteries, several belly cases, depressed compound fractures of the skull, bladder cases and big, compound fractures of the thigh.

Inadequate sorting of the wounded meant that their evacuation was haphazard and often the 'walking wounded' took places on the ships that should have been reserved for serious stretcher cases. Many seriously wounded soldiers were left on the beach, vulnerable and at risk of further attack.

Although the beach became more crowded, the work of the 1 ACCS was relieved by the arrival of the New Zealand Field Ambulance and the 4 Australian Fd Amb. Both units had set up dressing stations in the mouth of Shrapnel Gully (the main supply route) by the 27th April.



AWM C01675 Sick men embark from pier

THE LANDINGS AT GALLIPOLI

25th APRIL 1915



AWM P00196.006
New Zealand Ambulance Corps

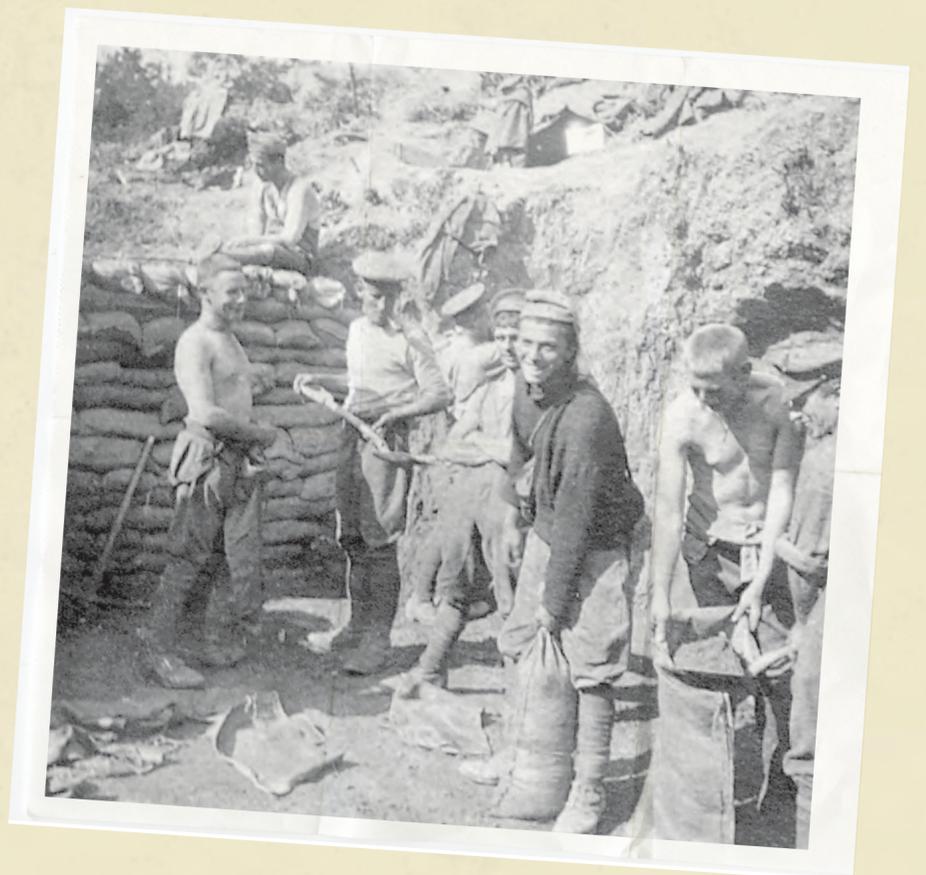
The New Zealand Medical force commander, Neville Manders landed and directed operations from the beach.

Charles Begg established the NZFA's dressing station on the beach and other officers such as Eugene O'Neill moved further afield. Landing with his bearers, O'Neill moved up to Plugge's Plateau:

[where]...finding it impossible to establish himself on the plateau where there was heavy rifle fire and no shelter, formed his wounded collecting post in some dead ground at the edge of the plateau...while the bearers went out in parties of two to search for wounded.

At the outbreak of war, medical students fuelled by patriotism and a sense of adventure rushed to join up. In August 1914 second year medical student Montie Spencer from Otago University volunteered and was posted to the NZFA at Gallipoli:

By Monday morning at 6a.m. 1500 men had been evacuated from the dressing stations on shore to the hospital ship, and warships and any transports where there were medical officers. I reckon it was a Sunday that will never be forgotten by anyone who went through it...



Medical students
Photo: Marlyn Spencer

THE LANDINGS AT GALLIPOLI

25th APRIL 1915



AWM C02422



Australian Fd Amb Dressing station
AWM C03370

The 2nd Field Ambulance including the stretcher bearers commanded by Charles Wassell, landed early on the 25th April and assisted with the multitude of wounded on the beach.

Stretcher bearer climbed up the ridges around Shrapnel Valley and searched for wounded. Herbert Reynolds wrote:

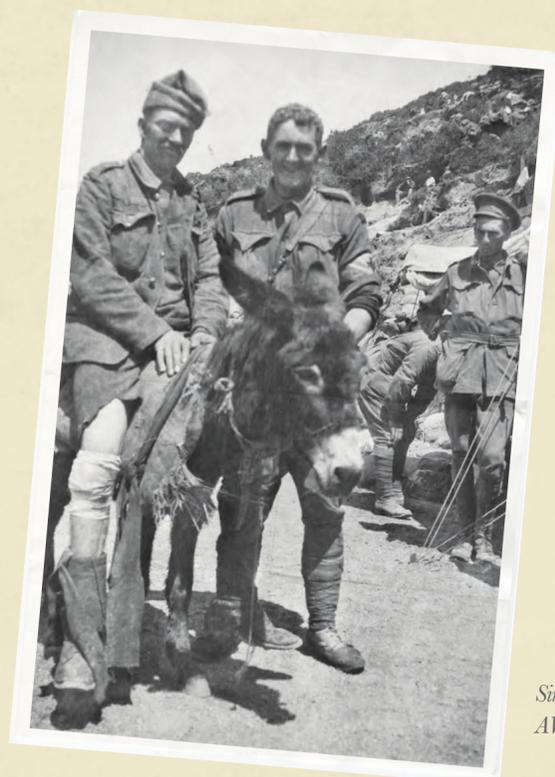
Captain Wassell went with most of B section to an aid post in Victoria Gully, the shelling was very severe at the time and there being no shelter for everyone, he took all except my party back to the bivouacs near the beach, leaving us to bring a wounded chap back...

There was an acute shortage of stretchers. The bearers had only brought 36 stretchers ashore and before the end of the day they had run out, so bearers often used makeshift stretchers slung between two rifles.

Made famous by John Kirkpatrick Simpson and his donkey Murphy, the 3 Fd Amb was commanded by Lt Colonel Sutton and Lyle Buchanan was in charge of the bearer section. The unit landed at the beach at Ari Burnu near what was to be known as the Sphinx and Buchanan wrote in his diary:

I don't know what it was, shrapnel, maxim or rifle – I was too frightened to look...I could feel the damned thing hitting me all the time in my imagination, while we couldn't see the other boats for the sprouts of spray all round and the men hit yelped and they whined and clawed the air as they died.

*...sprouts of spray all round
and the men hit yelped
and they whined and
clawed the air as they died.*



Simpson and 'Murphy'
AWM J06392

HOSPITAL AND OTHER SHIPS



*Deck of the HS Gascon
AWM H12938*

The strategy for the medical campaign was to send the seriously wounded to the base hospitals in Egypt. There were only two hospital ships provided - the *Gascon* for Anzac and the *Scotian* for Cape Helles.

But the extraordinary number of casualties meant that transports had to be used as temporary hospital ships. These were the 'Black Ships', so called because they were not protected under the Geneva Convention and were subject to enemy fire.

The tent and transport divisions from the Field Ambulances often did not land but worked on hospital ships or the requisitioned transports. After landing at Anzac on the 25th April, Hugh Poate from the 1 Fd Amb was posted to transport ship, *Itonus*.

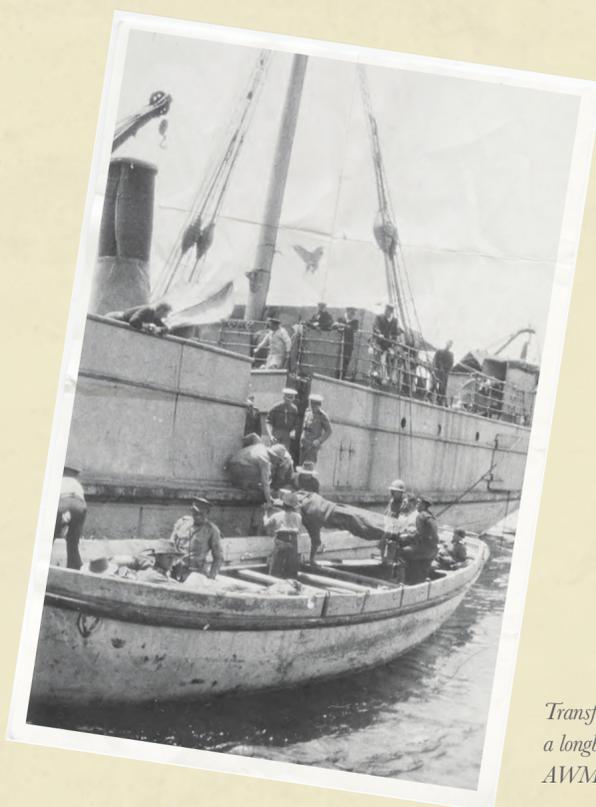
He was shocked by the conditions on board:

The wounded on the Itonus were scattered about all over the ship being packed in and huddled together wherever they could put them, irrespective of the character of their wounds...By the time we took over the ship it was in an awful state - decks filthy, patients in dirty blankets, food debris, bits of dressings, cigarette ends... Altogether we had 7 deaths on board before reaching Alexandria.

George Syme appointed to the *Gascon*, the only hospital ship at Anzac, had a different experience:

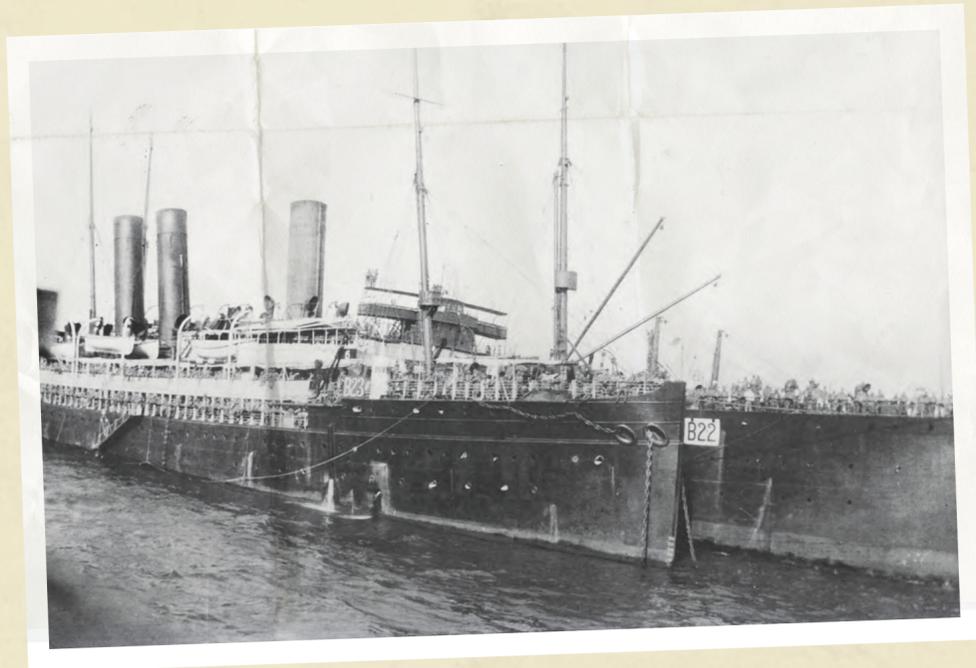
The Gascon was well equipped with a good operating theatre, having full provision for sterilization; a fair supply of ordinary instruments and apparatus; and a good X-ray plant...

By the time we took over the ship it was in an awful state - decks filthy, patients in dirty blankets, food debris, bits of dressings, cigarette ends...



*Transferring wounded from
a longboat
AWM P01815.007*

HOSPITAL AND OTHER SHIPS



*HMT Southland and HS Scotian (right)
AWM C01146*

Robert Fowler from the 1st Light Horse Field Ambulance was attached to the hospital ship *Scotian* carrying casualties on the three day journey from Cape Helles to Alexandria.

One of six doctors, [Captain Fowler] was tireless in his work, often doing the trip without any sleep whatsoever.

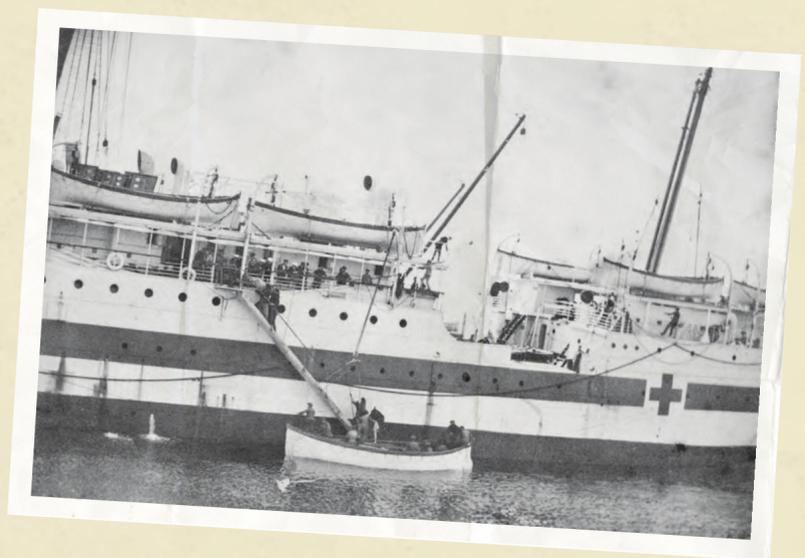
At other times things were quiet but there was always the threat of attack:

Lighter came alongside...for our medical stores & personnel for tranship made to GALEKA. When suddenly orders to cease all loading and every transport ship to heave anchor and clear off to MUDROS harbour at LEMNOS – a sub-marine scare.

There was also a lull before the major Turkish attack in May:

Orders to transfer Tent & Bearer divisions together with medical stores and baggage to SS GALEKA... Nick is also going back [to Alexandria] with all our horses & wagons & drivers. All the rest together with the NZ Fd Ambulance go aboard the G to do goodness knows what. She is not a hospital ship but can be used as such.

*She is not a hospital ship
but can be used as such.*



*Wounded being transferred from the Galeka
AWM P01287*

REGIMENTAL MEDICAL OFFICERS



AWM H103689

The rugged terrain and issues with communication meant that RMO's had a dangerous and difficult job. Alexander Marks was attached to the 3rd Field Artillery Brigade.

Landing at Anzac on the 25th April, Marks moved up from the beach to Gaba Tepe and was constantly exposed to shellfire. His Brigade was deployed in ten camps and he had to try and visit these each day:

Sometime in June the hot weather started, Diarrhoea and Dysentery set in and I found it impossible with such scattered units to do much in regard to special feeding of the men. The best I could do was issue the men small quantities of oatmeal, milk, eggs or arrowroot...

Mark's half-brother Espie Dods was at Chatham's Post with the 5 LHFA. In August he was awarded the Military Cross for his efforts with the wounded: *When our camp was being heavily shelled a man was wounded, Captain Dods left cover to attend to him and was himself, immediately struck down with shrapnel.*



Dugout of 4 LHR
AWM P00859.001

I found it impossible with such scattered units to do much in regard to special feeding of the men.

THE LANDINGS AT CAPE HELLES & KUM KALE



*French soldier on stretcher at Cape Helles
AWM P01815.007*

On 25th April there were landings at Cape Helles by the British 29th Division and a diversionary landing by the French at Kum Kale. These landings were a precursor to the battles of Krithia for the strategically important heights of Achi Baba.

Montie Spencer saw the landings in the distance:

...we could see a fleet of battleships and transports off the SW corner of the Peninsula, where the British and French were landing. Since then we've heard that French landed without opposition but the 29th Division was cut up a good bit.

A French Medical officer from Le Corps Expéditionnaire d'Orient wrote to his English wife:

I have been on board the Dugnay-Trouin to see our wounded there. The wounds are frightful... One sees a mass of dead on the Koum Kale shore. On the European side Krithia is burning. The distant hills are being bombarded. There are many ships everywhere.

When the Australian and New Zealand Infantry brigades were sent to Cape Helles in early May to help with the battles around Krithia, they included Eric Gutteridge from the 7 Bn who noted the terrain was very different to Anzac:

A patch of cultivated fields intersected by streams, bordered with elm trees...running towards Achi Baba.

*The wounds are frightful...
One sees a mass of dead on
the Koum Kale shore.*

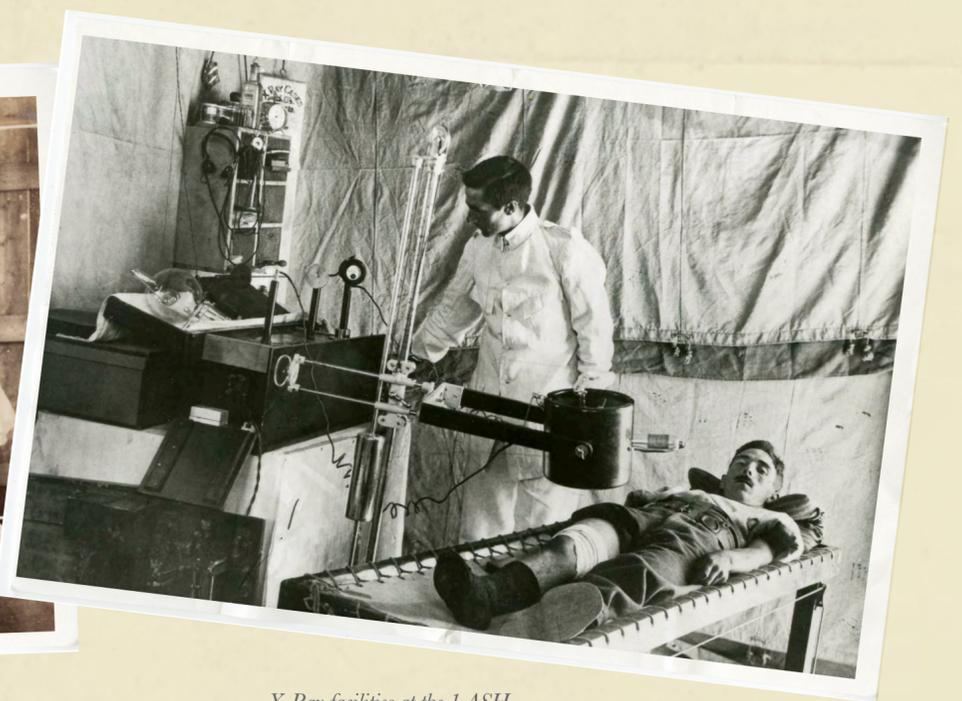


IWM Horse drawn ambulance at Cape Helles

THE HOSPITAL THAT SHOULD HAVE BEEN AT ANZAC



*Henry Powell operating at the 1 ASH
AWM P10300.015*



X-Ray facilities at the 1 ASH

Established as a 200 bed hospital at Lemnos in March 1915, the 1st Australian Stationary Hospital took all cases from the Mediterranean Expeditionary Force.

In April, the hospital was full with: 341 patients in hospital divided into 203 general cases, 80 cases of measles and 50 cases of venereal disease.

Although briefly sent to Cape Helles and Anzac, the 1 ASH a tent hospital commanded by Lt Colonel Bryant, was mostly based at East Mudros in Lemnos.

By May it had an X-ray unit and a small bacteriological unit:

Our X-ray plant and operating unit was ready about the 20th of May and bullets and shrapnel were being extracted in large numbers from this time onward. By the end of May two British stationary hospitals had been established, and also an Indian hospital and a British casualty hospital. All their cases were sent for X-ray examination to us.

*341 patients in hospital
divided into 203 general cases,
80 cases of measles and 50
cases of venereal disease.*



*Hospital ship Mauretania off Lemnos
AWM 11235.009*

WHERE WERE THE SERIOUS CASES SENT?



Australian General Hospital, Cairo
Photo: Harvey Broadbent

Although the disadvantages of delaying treatment became evident as the campaign progressed, two Australian General Hospitals were set up prior to the start of the Gallipoli campaign and continued to receive casualties throughout the conflict.

These were large base hospitals and the 1 AGH with its adjacent venereal disease camp, was at the Heliopolis Palace Hotel near Cairo. Its medical staff included John McLean who wrote:

They came in covered in filth and muck. Many had not had their wounds dressed for days, and on undoing bandages in some cases wounded limbs were found gangrenous and had not been touched since the first dressing...the lightly wounded, able to look after themselves, arrived in very good condition...dressed excellently at the front...well cared for on the way.

As Herbert Reynolds recorded, the 2 AGH established at Mena House Hotel, had a quiet start:

Spent the morning packing and loading up our transport wagons. At 10am took 2 patients to Mena House in one of our horse ambulances. Mena House is situated near the Mena tram terminus, it was a well-known tourist hotel, but is now converted into a military hospital.

In April, inundated with Gallipoli casualties, the 2 AGH opened a second hospital unit at the Ghezirah Palace Hotel and a month later, it had 1500 patients.

They came in covered in filth and muck. Many had not had their wounds dressed for days

The 1st New Zealand Stationary Hospital at Port Said was set up in July 1915 to receive casualties from Gallipoli:

Lt Col McGavin had at his disposal one house, formerly a school, 25 square E.P tents, huts for the messes and a recreation room but was short of equipment

The Hospital was sent to Salonika in October but tragedy struck when their transport, the *Marquette* was sunk en route to Greece.

TRUCE



*Turkish officer on beach
AWM A00843*

In May the commander of the 1st Australian Division, Major General William Bridges was hit by a sniper bullet which severed the femoral artery in his right thigh. He was transferred to the *HS Gascon* but the wound became gangrenous and he died on the 18th May.

The next day Turkish forces launched a major offensive at Anzac resulting in over 10,000 Turkish casualties. On the 24th May, an armistice was called to bury the dead.

Charles Begg wrote:

There must have been about three thousand dead Turks and a good few of our men... The unwonted quietness of the day was almost uncanny.

Another New Zealander, Percy Fenwick describes the horror of the scene:

Everywhere lay the dead – swollen, black and hideous – and all over a nauseating stench that made one feel desperately sick...

There must have been about three thousand dead Turks and a good few of our men

Charles Ryan who had fought for the Turks in the Russo-Turkish war of 1877-8, was at Anzac during the Armistice. As usual he was wearing his Turkish medals and at first the Turks thought the elderly surgeon must have taken the medals from one of their dead comrades. But Ryan told them proudly in Turkish:

I won these medals at the siege of Plevna with Gazi Osman Pasha.



*'Plevna' Ryan
AWM P02648.029*

AWM P01815.010

AUGUST OFFENSIVE



*The ridge too far..
AWM P11235.011*



ATL Maori Contingent

Also known as the Battle of Sari Bair, the August Offensive of the 6th-13th August was intended as a co-ordinated 'push' to secure the high ground of the Sari Bair range

The plan was that the British supported by the British IX Corps under General Stopford create a diversion at Cape Helles, while Australian, New Zealand, (including the Native Contingent Te Hokowhitu a Tu) and Indian troops, stormed the heights of Chunuk Bair.

The far ridge is the ridge we should have got to in August 7-8-9-10. Our men got up to it but were too few to hold it after 2-3 days continuous fighting.

The failure of the campaign, particularly the inability of General Stopford to advance his forces at Suvla Bay and disastrous battles like the Nek where two regiments of the Australian Light Horse Brigade were obliterated, is well known. The offensive also brought to light the tactical skills of the Turkish commander, Mustafa Kemal who successfully repelled the allies.



*Turkish trench
AWM A02599*

AUGUST OFFENSIVE



Stretcher bearers
AWM E00839



1 LHFA at Walker's Gully
AWM C03564

Work of the Medical Units

All units of the Field Ambulances were part of the August Offensive and the Light Horse Field Ambulances were very much in evidence. The 3 LHFA commanded by Rupert Downes, was sent back to Gallipoli from Lemnos in August. The unit supported the 4 Fd Amb and set up a collecting post in Aghyl Dere. After treatment, casualties were carried down to the beach for evacuation.

During the next few months, Downes lived under the constant stress of possibly being hit by a sniper, or a stray shell:

I don't take any unnecessary risks, but one can't live all day in a hole in the ground and one does not want to make a reputation for the other thing, which is easily made, and I know you would certainly rather be without a husband than that.

By August, Robert Fowler had also returned to his unit, the 1 LHFA and was responsible for a collecting post behind Table Top. On Thursday 12th August, he reported:

...steady stream of wounded going through all day... case of severance of the brachiae brought to DS dead.

A high profile casualty of the campaign was Neville Manders, ADMS of the New Zealand Expeditionary Force who was shot by a sniper on the 9th August.



AWM P11235.012

Downes lived under the constant stress of possibly being hit by a sniper, or a stray shell.

STALEMATE



*Field Ambulance dugout
AWM C03381*

By September 1915 the Dardanelles campaign had stagnated. Although the arrival of the 29th Division at Anzac relieved the exhausted troops, there were no major offensives or advances. Disease and the increasingly inclement weather were beginning to take their toll.

Claude Morlet an Ophthalmologist, was posted to the 10 Bn at Anzac in September 1915. In a letter to his mother he alludes to the problems of disease and gave a graphic description of his dugout:

When I arrived at the beach, I enquired for the Clearing Hospital, in which as you know, Colonel Giblin, Jack O'Brien...had left Australia. Every one of these is now away sick... I awoke next morning and found myself in a little cave, cut out of the side of a cliff, with a waterproof sheet hung over the front. This was a 'dugout'... The 'crack - crack' of rifles was still going on, but was now punctuated every few moments by a crash which brought fragments of mud from the walls and roof of the dugout, patterning on the floor.

I awoke next morning and found myself in a little cave, cut out of the side of a cliff, with a waterproof sheet hung over the front.



*British stretcher bearer, Cape Helles
AWM G00370*

DISASTER OF THE NOVEMBER STORM



Kitchener and Birdwood in the trenches
AWM G00573



AWM H14004

In October 1915, General Sir Ian Hamilton was ordered to relinquish command of the Mediterranean Expeditionary Force. He was replaced by General Munro and in November, by Sir William Birdwood.

Lord Kitchener Visits

The fate of the Dardanelles campaign was sealed when Lord Kitchener arrived at Gallipoli on the 12th November to inspect positions at Anzac, Suvla Bay and Cape Helles.

Rupert Laidlaw from the 2 Fd Amb commented:

Lord Kitchener looked very fine and conversed freely with the men, he thanked all ranks for what they had done at Gallipoli, we all think some big move will be on soon.

After Kitchener's visit, the weather began to change and sickness became endemic. Albert Coates recorded in his diary:

Weather is very cold. Jaundice is very prevalent among our boys, also septicaemia.

November Storm

Disaster struck on the 27th November with a severe storm and blizzard. At Suvla Bay, torrential rain caused the low lying trenches to flood, then it snowed and the water in the trenches froze. There were thousands of frostbite and exposure cases. Claude Morlet had just gone to his new quarters at Anzac, an open bivouac on the hillside when the storm struck:

Shortly after dark the gale increased to a hurricane which blew away our blanket covers, and almost immediately, an absolute deluge of rain fell...Young Captain Loubert and I scrambled up the hillside frequently slipping and falling in the slimy mud and walked about on Artillery Road, which was then half under water. The rain had stopped, but the wind howled bitter and freezing with increasing fury! There was no dry place – not a blanket nor a garment and no shelter.

EVACUATION



*Turkish officers watch the withdrawal of allied ships
AWM A05297*

Rupert Laidlaw was right – the ‘big move’ he predicted came in early December when the British government finally decided to evacuate the Peninsula. At this stage, there were 130,000 allied troops, around 15,000 animals and close to 400 field guns still in situ.

The carefully planned withdrawal was staggered with Anzac evacuated on the 20th December. Charles Bean wrote:

At dusk the first parties began, with padded feet, to move to the beaches, they wound along the well-known paths and trenches – all carefully marked for this night – to Anzac Cove and North Beach.

As casualties were expected, the 1 ACCS which had been the first to arrive at Gallipoli, was the last to leave.

Edward Rowden White temporarily in charge of the 3 LHFA, remained during the evacuation. Although there was no room on the barges, White managed to save most of his commanding officer's possessions. Rupert Downes' response was pragmatic:

Thanks Ted for bringing my things, I'm sorry you forgot my riding boots.

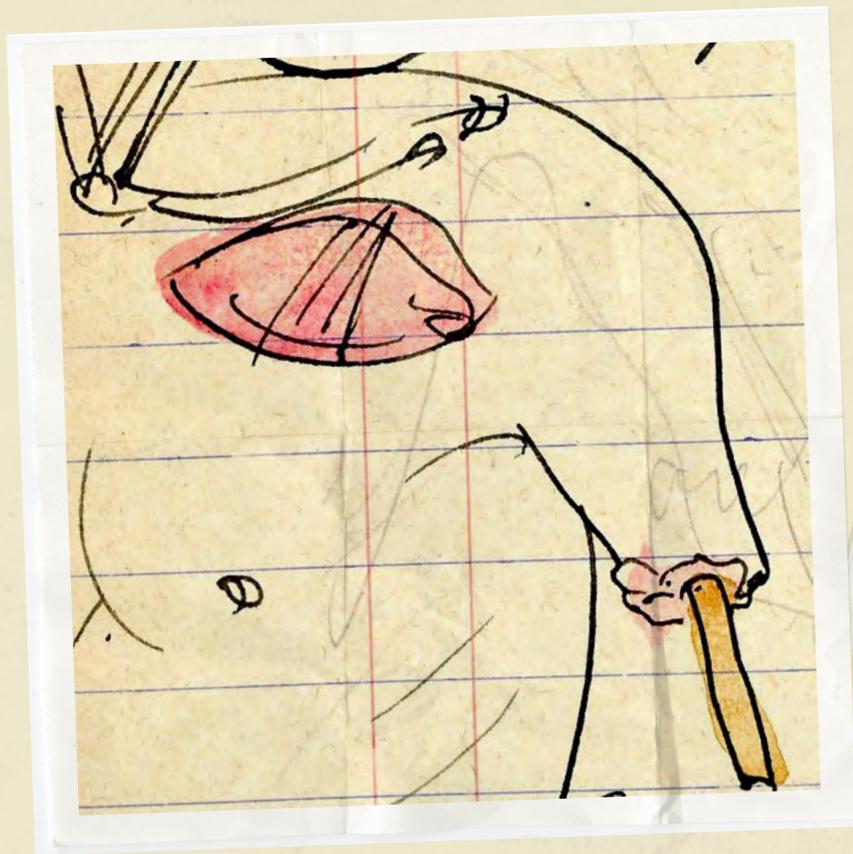
The evacuation was a complete success with no lives lost – and after the evacuation of Suvla Bay and Cape Helles, the Dardanelles campaign was over.

The evacuation was a complete success with no lives lost

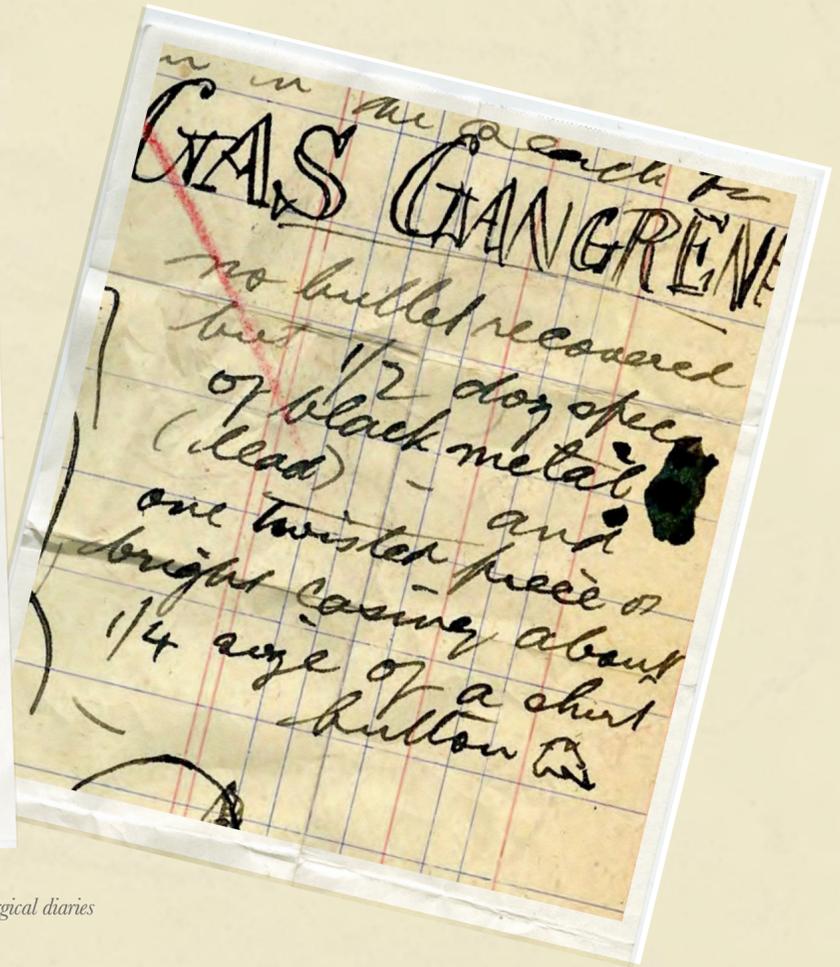


*Neville House at Gallipoli
AWM C00695*

WOUNDS



Archibald Watson's surgical diaries



During the Gallipoli campaign most wounds were treated without primary suture. Prior to the existence of antibiotics, most wounds were either contaminated or infected, so they were only sutured when dead, damaged or infected tissue had been removed (debridement).

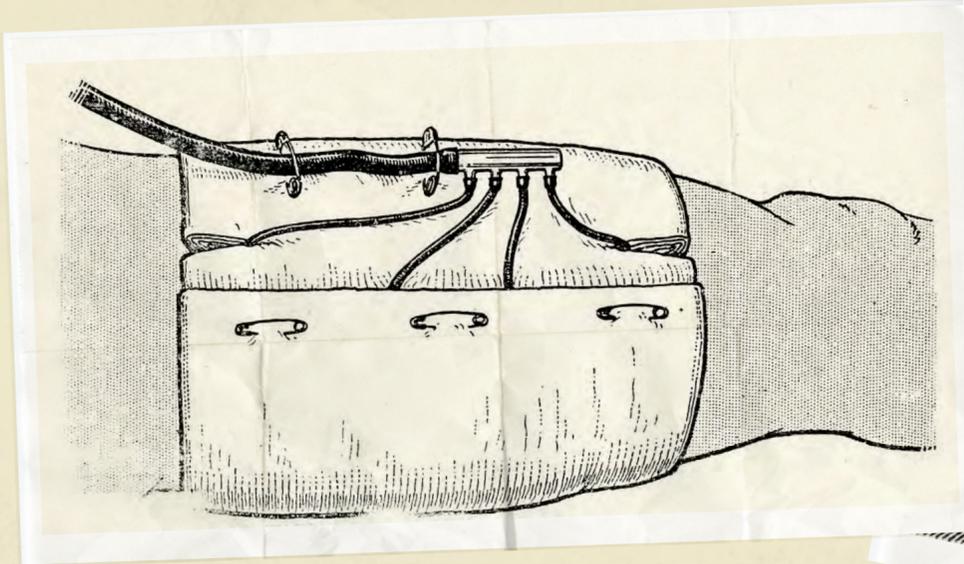
George Syme who was aboard the hospital ship *Gascon* describes the process of dealing with wounds to limbs:

Many of the rifle and machine gun bullet injuries were not that clean... [We operated] under general anaesthetic, to make free incisions to expose the tracks of the wound thoroughly, to ligature divided vessels, and to cut away damaged fascia and muscle with knife and scissors, to remove detached and badly damaged fragments of bone, to wash every nook and cranny of the wound thoroughly with peroxide of hydrogen lotion, then with biniodide of mercury lotion, and to dust the whole of the wound surface with a powder of salicylic and boric acid. Drain tubes were inserted in dependent conditions. No sutures were used. A voluminous dressing of sal alembroth gauze and wool was applied and then suitable splints.

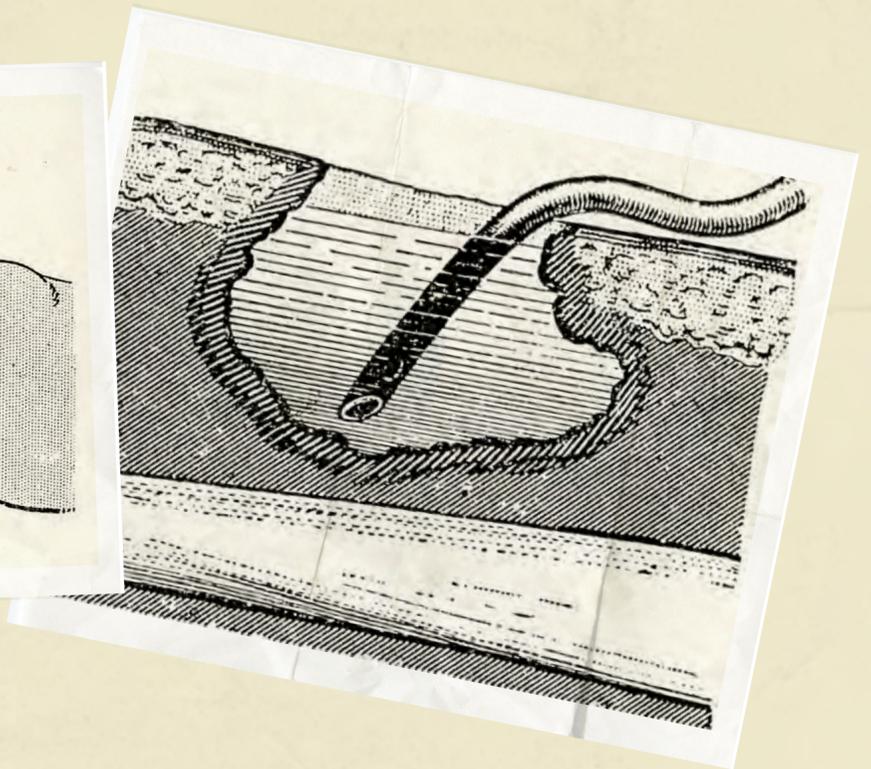
In order to avoid gas gangrene (bacterial infection that produces gas in gangrenous tissue), medical teams recognised the importance of prompt surgical treatment and evacuation to hospital. Most gas gangrene cases occurred when shrapnel was not completely removed from wounds.

...cut away damaged fascia and muscle with knife and scissors, to remove detached and badly damaged fragments of bone...

WOUNDS



Daikin-Carrel irrigation system



During the early years of the war Henry Daikin worked with Frenchman Alexis Carrel on a disinfectant solution for wounds. Daikin and Watson Cheyne tested hypochloride in the Dardanelles in October 1915.

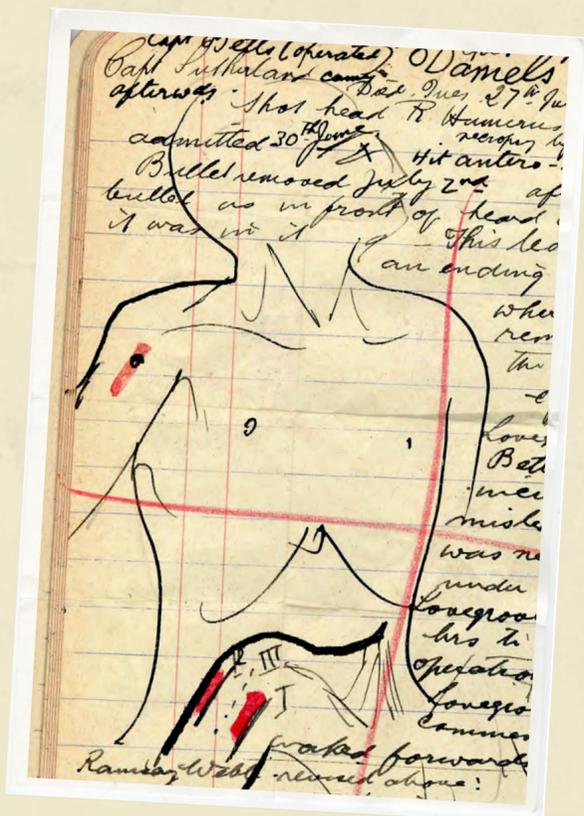
At this stage of the campaign there were fewer casualties so the sample group of 28 patients was small. Cheyne concluded that:

...this method is well worth following up, but especial attention must be given to the free opening of the wound and frequent injections of the antiseptic solution.

Treatment of Shock

Shock was poorly understood in 1915. Blood transfusions were not used until 1917 and resuscitation teams to treat the severely wounded were not formed until the end of the war.

Medical teams at Gallipoli recognised that soldiers benefited from being warmed and infused with intravenous fluids. From a surgical perspective the decision to operate depended on the nature of the shock and the seriousness of the operation. If the patient was cold and without a pulse, or a long or complex operation was required, it was better to treat the shock first. Generally, it was noted that: **a condition of shock calls for the quickest possible process of operation – the simpler the better...**



Archibald Watson's Surgical diaries

WOUNDS

Types of Wounds

Wounds treated during the Dardanelles Campaign

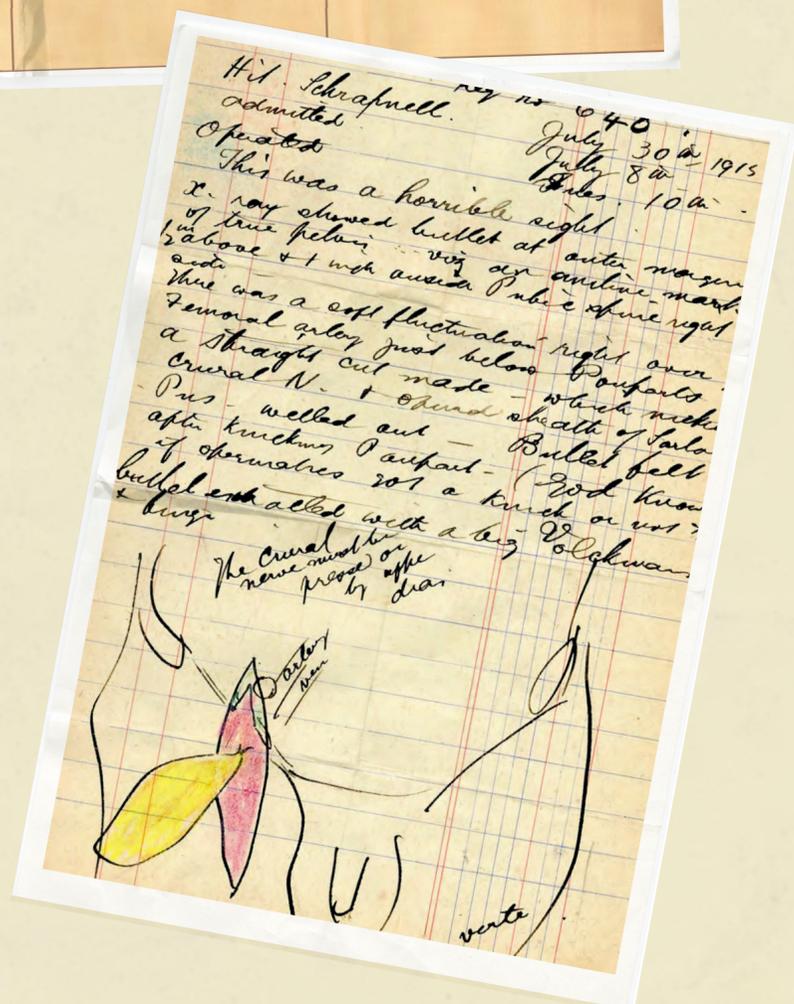
Wounded Region	Number	Deaths in Medical Units	Mortality (%)
Head and Scalp	2120	381	17.9
Face	1346	76	5.6
Neck	398	28	7.0
Chest	1104	159	14.4
Abdomen	736	287	38.9
Perineum, bladder & rectum	90	9	10.0
Back	1397	107	7.8
Upper extremities	6323	122	1.9
Lower extremities	7663	302	3.9
Unclassified	433	-	-
	21,580	1471	6.8

Abdominal wounds

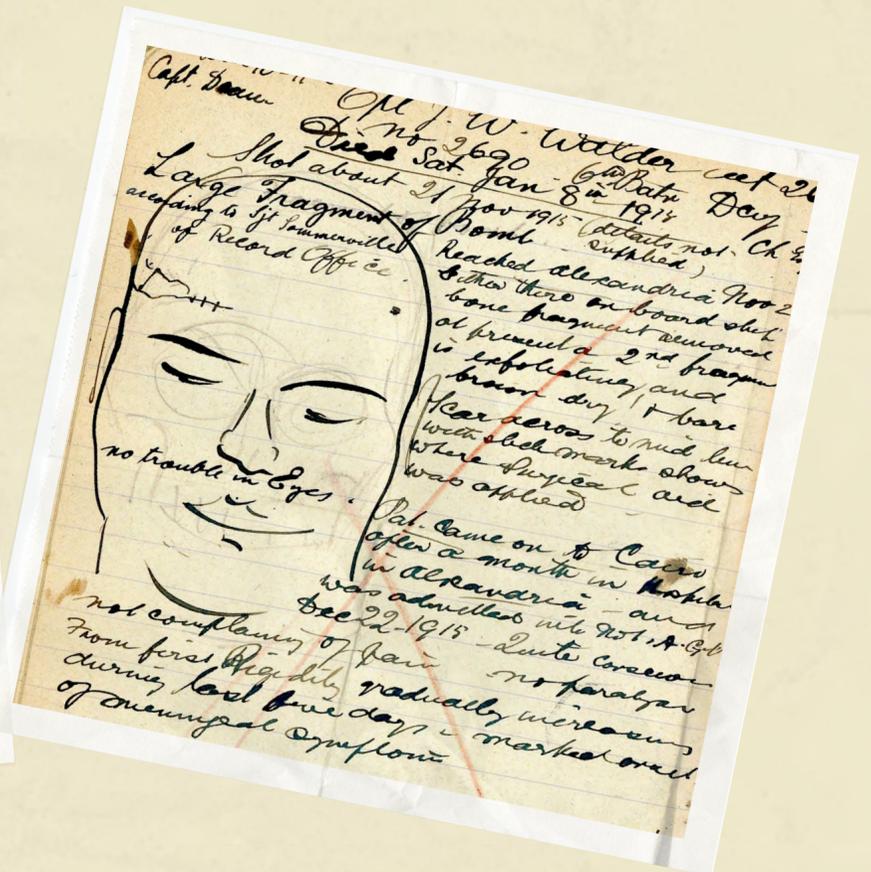
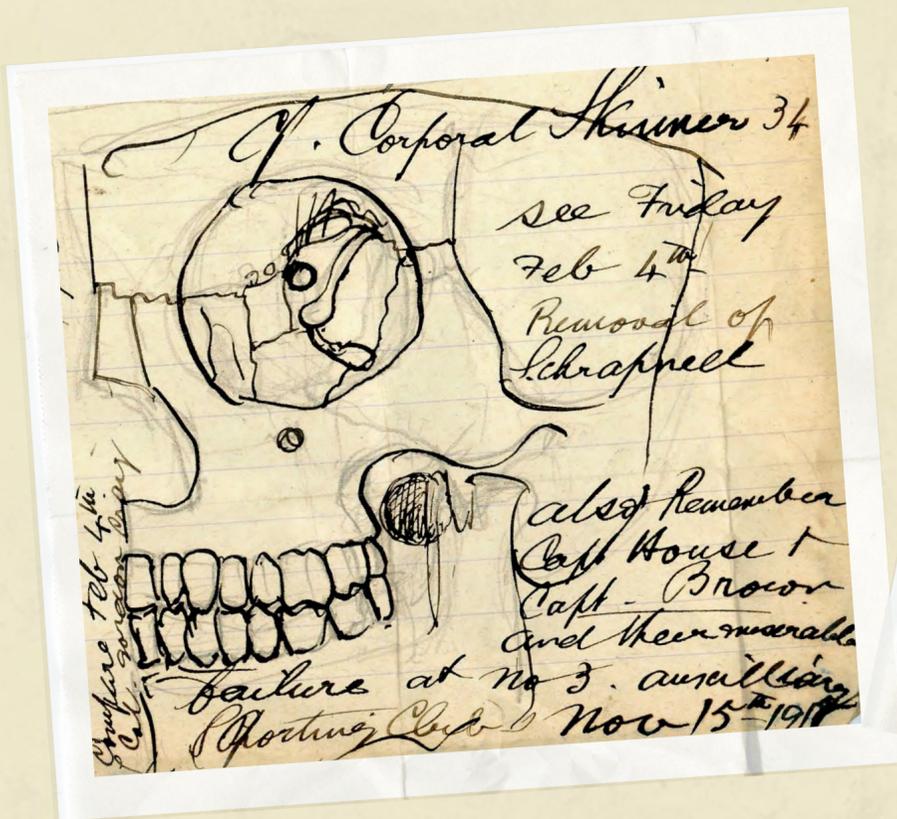
These were among the most damaging wounds and it was considered best to treat them conservatively and not operate. However, George Syme adopted a progressive approach and noted that they operated on all abdominal cases except those that were obviously hopeless.

As the campaign progressed, the pattern of wounding changed. Colonel Beetson of the 4 Fd Amb recorded that:

During the first fortnight or three weeks abdominal wounds predominated. Some of these were ghastly in the extreme, the contents of a man's pocket being frequently found in the intestines... when the men got well entrenched, the number of abdominal wounds lessened and head injuries became more frequent.



WOUNDS



Head and Scalp wounds

Generally soldiers with superficial shrapnel wounds, compound fractures of skull and concussion reached the care of military surgeons. More severe forms of neurotrauma would have had high mortality. In 1915 Neurosurgery was yet to become a specialty and general surgeons dealt with penetrating head and spinal wounds.

Chest Wounds

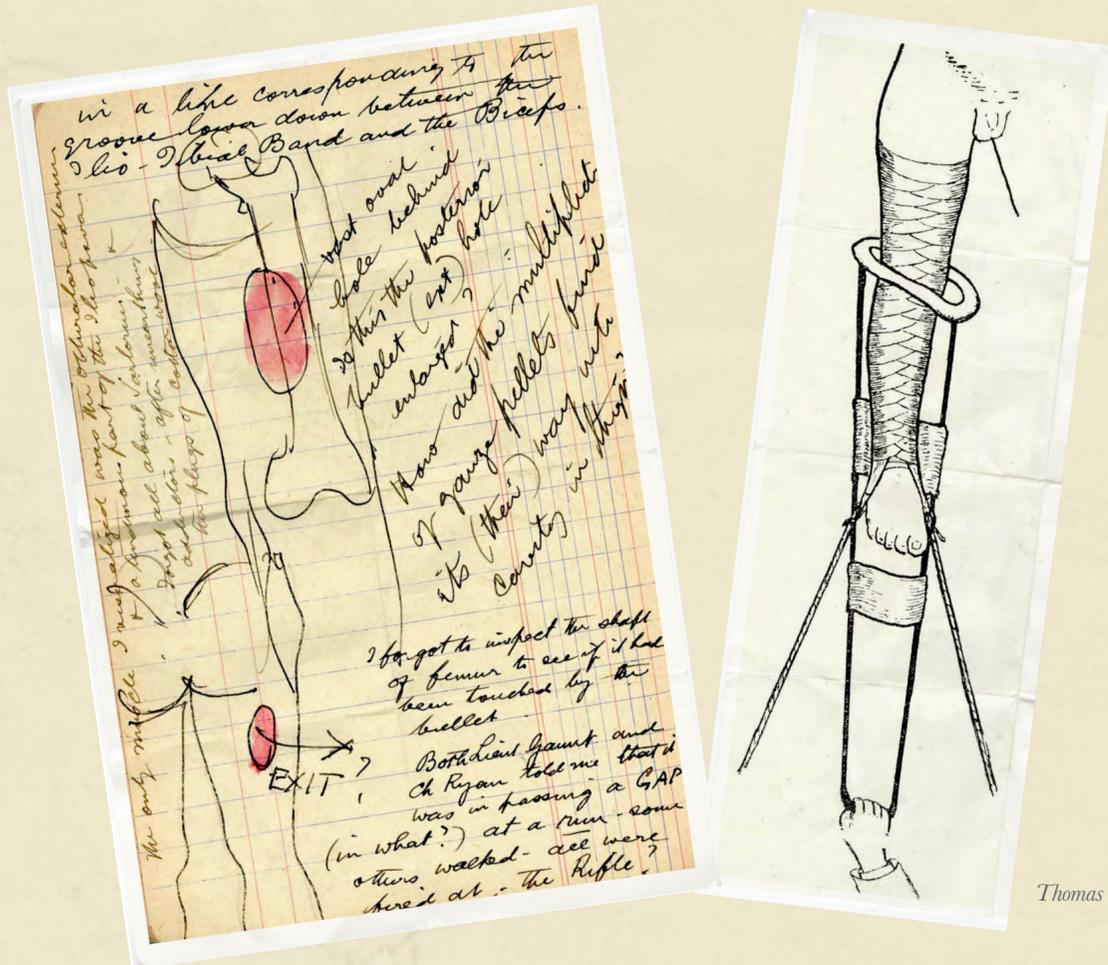
At the start of war, the prevailing wisdom was that penetrating wounds of chest were treated conservatively. It was not until 1916 that there was a more aggressive approach to penetrating chest injuries. However there were indications for surgical intervention; the presence of a foreign body in chest, significant haemothorax (blood in the pleural cavity), damage to diaphragm or internally facing rib fragments.



IWM Casualty Clearing Station

Radiology was used to locate bullets and shrapnel. At the 3 AGH on Lemnos Lockhart Gibson used giant magnet to extract intra-ocular foreign bodies from the eye. Colonel Bryant mentions the case of a patient referred to chest X-ray at the 1 ASH on Lemnos. He had a bullet lodged in the wall of the left ventricle and had complained of coughing blood, but as he was otherwise asymptomatic, the seriousness of his condition was not recognised.

WOUNDS



Thomas splint

Open fractures, especially of the femur, had an exceptionally high mortality rate at Gallipoli. In 1914 Robert Jones had suggested to the British War Office that a Thomas splint would simplify femoral fracture management.

Some doctors including Frederic Bird acquired Thomas splints at their own expense and Bird helped establish a factory in Alexandria to manufacture them. When the Thomas splint was adopted by the Allied medical services in 1916, it reduced the death rate from open fracture of the femur from 80% to less than 20%.

Facial Wounds

Patients with facial wounds were sent to England for treatment. In 1917 a special unit to deal with facial injuries was set up at the Queen's Hospital Sidcup.



Pte W Blacklock

