M.A.S.H. in Mat Ashur
The Beginnings...

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Abstract: This paper deals with the basic principles of the first aid organization for the Neo-Assyrian Wounded In Action after a won engagement during a military campaign. The scarcity of evidence does not allow for an exhaustive catalogue of sources, which is quite a shame, but this research will propose the basic types of specializations, personal, treatments and cures concerned by these events.

Keywords: first aid, wounded, battle, medicine, doctor, surgical, hospital, military, Assyrian, relief, warfare, healer, soldier, physician

I swear by Apollo Physician, by Asclepius, by Hygieia, by Panacea, and by all the gods and goddesses, making them my witnesses, that I will carry out, according to my ability and judgment, this oath and this indenture.
To hold my teacher in this art equal to my own parents; to make him partner in my livelihood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentured pupils who have taken the physician's oath, but to nobody else.
I will use treatment to help the sick according to my ability and judgment, but never with a view to injury and wrong-doing. Neither will I administer a poison to anybody when asked to do so, nor will I suggest such a course. Similarly I will not give to a woman a pessary to cause abortion. But I will keep pure and holy both my life and my art. I will not use the knife, not even, verily, on sufferers from stone, but I will give place to such as are craftsmen therein.
Into whatsoever houses I enter, I will enter to help the sick, and I will abstain from all intentional wrong-doing and harm, especially from abusing the bodies of man or woman, bond or free. And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets.

[1] This paper is dedicated to Corporal Desmond T. Doss Medal of Honor, one of the best examples of first aiders.

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Now if I carry out this oath, and break it not, may I gain for ever reputation among all men for my life and for my art; but if I break it and forswear myself, may the opposite befall me
Oath of Hippocrates

Introduction

Though many papers deal with the healers and other types of physicians during the Neo-Assyrian period, no one touches the fate of the Neo-Assyrian soldiers Wounded In Action after a combat. As nothing is known so far on such a topic, a lot of the data available in the textual, visual, and material evidence provide basis for a possible scenario after a victory.

Many studies though have been prepared on the different aspects of the ancient near eastern physicians, as the list of Ugarit, the Egyptian papyri and mummies, the Greek and Roman instruments and the likes, which will provide a base for a comparative research on this interesting topic.

A. The End of a Combat

Though nothing is known so far on how the Neo-Assyrian senior commanders used to deal with their casualties at the end of a fight, some possible events surely happened, if only to keep the maximum of Assyrian – breed man – power alive and ready to use.

A.1. The Fight

As this will be demonstrated in a forthcoming monography, the Neo-Assyrian infantry troops were not that a fast moving element on a battlefield, so most of the men were wounded or dropped on the way or around the location of their unit.

Shields would have been employed to break bones and burst insides, while spears and arrows would pierce muscles and organs, blades would cut and incut flesh, bones and organs, while slingstones, chariot wheels and horses would break and trample bones and bodies (Fig. 1).

Arrows were the preeminent weapons employed from a distance, and surely would have hardly been lethal if only one reached the target, but an ancient near eastern archer could surely deliver up to five missiles on the same target in less than a minute, as the Plain Indians did.[2] This would explain why enemies are usually depicted with some arrows inside or around their bodies when these are

[2] Bill 1862: 369.

not stuck in their head, as a furtive way to display the very high level of marksmanship in speed and accuracy of the Assyrian archers.

As this paper leads the way for the forthcoming monography on the same topic, where the contemporary human remains will be much more analysed, one will not stay on the whole range of wounds that soldiers could suffer during the Neo-Assyrian period.

A.2. The Lull

All of a sudden, the moral and the will to fight of certain troops among the enemy units would fail, thus they would turn their back and leave the battlefield. As everybody on both sides was running in every direction to gather the troops and to pursuit the enemies or to catch with the fleeing ones and run to the hills, a peculiar lull would follow in the activities of both armies.[3]

A.3. The Perimeter

When a unit was no more receiving orders from its hierarchy and that no more enemy stood in front of it, the Commanding Officer would stop and gather his troops at a peculiar location, like where they stood, regroup, and rest them a while. Meanwhile, sentries would have been posted around the unit's location to ensure a security ring around the resting men.

A.4. The Rescue of the Wounded in Action

As the position was organized, men would survey the area for loot, dead enemies to cut their heads off and equipment to resupply, awaiting an always possible counterattack. Depending on the priorities stated by the Commanding Officer or the troopers, men would bring their wounded comrades around their standards, maybe on a peculiar side of the security perimeter. The other ones would have perhaps been occupied by the loot, the dead comrades, the retrieved equipment and the enemy heads.[4]

Obviously, men who had been struck or ran over by chariots or horses, disembowelled by the weight of the wheels, cut off in two, who had felt from the top of a city wall or from a horse, could surely and hardly have been cured.

[3] De Backer 2020
[4] De Backer, forthcoming a.

B. The Natural Triage of the Wounded

While they were rescuing their injured comrades, the Neo-Assyrian soldiers were obviously practicing a kind of natural categorization of the wounds.

Three main elements should, and surely were, taken in account for the triage of the wounded on the battlefields: the type of weapon, the fencing practiced and the part of the body injured. More criteria existed, as the violence of the impact, the quantity of injuries, the quantity of lost blood and so on.

Insofar, nothing is known on the possible knowledge and treatments developed by the Neo-Assyrian era physicians to cope with haemorrhage, if only that they surely had a lot of time to learn that a massive loss of blood meant death in 99 percent of the cases.

B.1. "An Ailment I Will Treat"

In a way or the other, the ancient Assyrians roughly knew if a wound was mortal or if the injured person had a chance to be saved, as even nowadays one knows that a broken neck or a crushed skull is more likely to induce death than an arrow stuck in the arm or a cut on the bottom.

B.2. "An Ailment I Will Contend with"

Still as nowadays, people could as well identify serious wounds, as a hacked arm a chin crushed under the wheel of a chariot or a rib broken by the kick of a horse. Surely even the common citizen knew that these were injuries that required a specific and dedicated assistance but that they could still had some chances to survive.

B.3. "An Ailment not to be Treated"

As the saying goes or as the ancient Egyptian medical papyrus writers used to state, some patients had to be left to their mooring sticks until the sad period ended.[5] Some wounds like a crushed skull, an arrow in the lung or in the neck, a thoracic flail or a deep puncture through the inner organs were more than hazardous to treat and they put the survival of the wounded in jeopardy.

This comparison with a ship left at its anchorage points seems to mean that the injured person would be awaiting a miracle for his or her survival, though they could as well have been left unattended. They could have been helped in any ways

[5] Breasted 1994: 6, 10, 40, 45-46, 134-135.

by some empathic person, to reach the end of the period so bursting of the spleen, the kidney or the heart could have been classified here as well.

Ailments of this last category could have been inflicted by shield – bosses, breaking the face and some ribs and piercing the lungs or inducing a blood loss in the chest, so flail segments, haemothorax, pneumothorax, haemo-pneumothorax and eviscerations would have surely been amongst those. Concussion, the burst of the spleen, of the kidney or of the heart would have probably been named in this sort of wounds requiring a good amount of luck or divine help.[6]

C. Natural Categorization of the First Aiders

A natural selection among the practicians would have surely existed during the Neo-Assyrian period and this would have been linked to the ways and means by which they had acquired their knowledge, skills and experience.

Four specific levels of skills can be proposed to categorize the first aiders: those who had learned with Mumy, those who would have spent a long period in fighting groups, those who would have studied the art of treating wounds and the specialists, whose long studies would have defined as *asippû* or *asû.*

C.1. The Traditional Knowledge of Mumy

The basic knowledge of every soldier surely relied on what his mama said and used to do when he was a kid and hurt.

Thus, the troopers used their knowledge of traditional customs to help their wounded friends. This could possibly deal properly with lights cuts, clean light punctures of muscles and neat fractures of limbs.

While they were kids, people surely had the opportunity to roam around the butchery of the village and see or learn some tricks, like ablation of small, almost external organs, as eyes, ears and noses.

Demonstration of the lawful employment of ablation, torture and death according to the laws would also and surely have helped people see what happened to the body in particular situations.

Sadly, it surely proved less satisfactory facing huge bleedings, wide cuts, open fractures, punctures of the body, or severe wounds to the head.

[6] For more details on the wounds inflicted by the weapons and fencing style of the Neo-Assyrian period, see De Backer, forthcoming b.

C.2. The Experimental Knowledge Learned in the Army

Centuries of practice and several meetings with allies, enemies or foreign people during the campaigns most probably helped the Assyrians to develop a particular and empiric science for the treatments of the most encountered wounds and torture.[7]

Arrows, spearheads and mace-heads were the most basic weapons in the ancient Near East since the Prehistory, and obviously were the weapons whose wounds were the best known how to be treated.

The keen and precise depictions of the wounds in the visual monuments, not even to talk about the weaponry, armours and fencing who will be dealt with in another paper, clearly demonstrate that they knew what kind of wounds would kill, how, and how long it would take.

C.3. The Medical Knowledge Learned on the Trade

As Ambroise Paré and several other barbers before, and after, him did, young barbers, or students in what we could call medicine today, would have wandered Mesopotamia in search for places to learn specific tricks or gain experience, either along a famous practician or with an army on the many battlefields.[8]

This assertion finds its base through the existence of documents like the Edwin Smith Papyrus who displays a clear experimental knowledge of battlefield surgery in Egypt during the Second Intermediary Period.[9]

C.4. The Specialised Knowledge Taught in Temples and with Other Practicians

Specialised practicians would surely have accompanied the most senior or high valued officers on campaign, thus they would have spent most of their time with their essential patient. Nevertheless, some of them would have obviously started their career as wandering students or with their parents, as the famous John Bradmore did, though they might have also shared their skills with the common soldiers, as Dominique Larrey did, before entering the temples, where they might have been trained.[10]

[7] De Backer 2009; 2010.
[8] Malgaigne 1840: 233.
[9] Breasted 1994.
[10] Getz 1998: 8; Larrey 1803.

D. Medical Assistance Procedures

With the available sources, a basic sequence of Medical Assistance for the Neo-Assyrian Wounded In Action can be proposed, employing the palaeopathological sources and other, more basic elements.

D.1. First Aid on the Battlefield

As stated in the preceding lines, the Wounded in Action surely received a peculiar treatment, depending on their status and their level of attrition.

Henceforth, the first aid provided to the Neo-Assyrian soldiers on the battlefield probably relied basically on compressive bandages, against cuts and punctures, and perhaps even some garrots, as their custom of amputation would lead one to believe they were able to stop a massive bleeding that would have caused death. Some depictions of Scythian and Greek origins, though realized during the fourth-third century B.C., display warriors bandaging each other (Fig. 2).[11]

These treatments, added to the basic cure of simple fractures of the limbs with a series of splints, like an arm or a chin, could be realized on the battlefield without too much difficulty, and the soldiers could be sent back to camp or to the nearby villages for convalescence.

D.2. Intensive Care at the Camp

Specific people would have needed a particular attention to treat their wounds, and these men would probably have been brought to camp, where more specialized practicians could have surely been found among the numerous camp followers. These medics could perhaps be identified with the individual figures usually depicted in assisting the torture or dissection of defeated enemies (Fig. 3).[12]

Surely, there were two types of Neo-Assyrian camps on campaign: the temporary ones, pitched for a halt on the way, and the permanent ones, set for a siege or to protect the supply and communication lines.

[11] Olmer 2009: 6, fig. 19, 22, fig. 12.
[12] De Backer 2009.

a) Temporary Camps

In the temporary camps, limbs that had been crushed by a horse or a chariot could be amputated, arrows could be taken out of their punctures and bleedings could be treated for it only needed water, fire, grease, forceps and a saw.

With the massive amounts of arrows and spears used during the Neo-Assyrian period, as it already appears on the list of instruments belonging to Krw, a physician from Ugarit, medics probably employed forceps. These could be compared to those found and depicted on a painting from Pompei, or spoons that could be compared to the spoon of Diocles to remove the arrowheads from the body (Fig. 4).[13] A basic surgical set surely included a saw, some lancets and a trepan, that surely went with ointments, bandages and grease, as one learns from the Papyrus Edwin Harris to close the gaping wounds.[14] This would have prevented bacteria and water to pour into the wound, and grease, perhaps improved with some specific products, would have prevented the drying blood and liquids to stick to the bandage and be torn off each time the wound was tended.

As explained in Dr. Bill's paper, arrowheads could be stuck in the body when the arrow shafts was pulled or broken to be removed, and yet this surely was also a knowledge that the Assyrian physicians had. They would have as well a device intended to push the arrowhead through and get it out from the other side of the wounds, when it was possible, of course.[15] If not, the physicians would have had to enlarge the wound with the lancet, probe it with his finger or a probe while an assistant would have had to keep the lips of the cut open.

Thanks to the research of Dr. Bill on the treatment of the arrow wounds, one can assume the different and basic ways to take care of these traumas, as to attach a wire loop around the head of the arrowhead when it was stuck inside a bone and could not be taken out by shaking it or when no forceps were available. Then, the physician would have had to pull the loop as his assistant still was keeping the wound open to avoid any effect of suction back until the loop held the arrowhead tight and could be pulled out. This might have taken more than a try in many cases, according to the depth of the penetration of the missile in the body.[16]

Tweezers were probably employed to remove little splinters of bones, as they were already employed for ear-hygiene during the Third Millenium B.C. at Ur.[17]

[13] Stieglitz 1981: 52-55; Olmer 2009 : 22, fig. 13; Salazar 1999: 49.
[14] Meyer-Steineg 1928: 19, fig. 10.
[15] Bill 1862: 366-367.
[16] Bill 1862: 370.
[17] Potts 2012: 764.

Spatulas could be used to pour ointments or powder in the wounds, to move pieces of broken bones, and to keep the lips of the cuts open while the physicians were working.

Syringes, who were probably already employed for the preparation of the V.I.P. before their internment, could as well have been helpful to clean the wounds from the blood, filth and dust before any action was taken on the wounded soldiers.[18]

While nothing is known so far on the practice to sew wounds, compressive bandages and, perhaps, cauters when fire was available could have been employed to stop massive bleedings. The story of the healing of the wound suffered by Telephus, king of Mysia, with the spearhead of Achilleus, could be a hint to the employment of haemostatic powder, or cauterization, as a comparative practice employed during the Dark Ages in Asia Minor (Fig. 5).[19]

As some medicine practitioner from Egypt would put it, there were wounds who could be healed, wounds who had to be dealt with, and those who had to be combatted but when the patient had to be attached to his mooring sticks, the sad period had to be passed away.[20] As most of the Slain Archers found by Winlock displayed wounds on the head that had been made with a weapon like the mace, and as many Assyrians Officers carried a mace, one could imagine these had to put an end to the suffering of their men with the item of godly power, and not an enemy weapon.[21]

Such camps could be found near burnt cities as Ashdod, where amputated limbs have been discovered, or next to Deir El Bahari, where several tens of Egyptian War casualties were discovered, still with their combat, and possibly mooring sticks deliverance, wounds.[22]

Wounded In Action would possibly have been brought to the area reserved for the tents of their units and, once treated, possibly stayed in the tents with their comrades fending for them, until the departure of the physically fit remaining soldiers with these units and the campaigning army.

b) Permanent Camps

More permanent camps, as those set in front of besieged cities or in places where no stronghold or control point built in architecture could allow the defence of the

[18] De Backer 2022.
[19] Pliny the Elder, 25, 42; 34,152; 35, 71; Deiss 1989: 58.
[20] Breasted 1994: 6-10.
[21] Winlock 1945; Vogel 2003.
[22] Haas 1971: 212-213.

supply lines and the controlled territories, would receive Wounded In Action of a higher standing or with more severe traumas perhaps.

Limbs that had been badly cut by blades, twisted, broken, trampled by horses crushed by chariots wheels would have been treated in the permanent camps, where amputations would have been realized on wounded friendly soldiers. This produced the remains of wrist or ulna as those who were found in Ashdod by the dozens, with teams dedicated to bury the cut pieces further away to avoid epidemies, as those who where found near the dispensary of Waterloo (Fig. 6).[23]

Places like these could possibly be linked with the three trepanised skulls of Lakish, which surely did not belong to common rank and file troopers (Fig. 7-8).[24] The wounds on the skulls of Lakish clearly demonstrated that the trepanation was realized by a practician that had not any specific trepan-shaped tool with him and who had to improvise with a dagger. Strangely, a trepan belongs to the series of "Babylonian" surgical instruments discovered at Nineveh, along with lancets and a saw (Fig. 9). Interestingly, the blade of such a saw could have let such wounds on the skulls, and the trepan presents a kind of groove where the string of a small bow could have been set to use the drilling movement, as in carpentry or jewellery. The shape of these lancets, with a very long handle, could display that they could be employed to cover the arrowhead inside the wound and take it out of it. Meanwhile the small head of the trepan demonstrates a knowledge that pressure could be removed through a small hole in the skull and not through a massive loss or bone. This way, a proper knowledge and interest in polyvalence, accuracy and speed in the treatment of the wounds was essential to the surgeon who used these instruments.

As Dr. Bill stated, sometimes muscles contracted upon receiving the arrowhead through the flesh and this phenomenon would have caused the arrowhead to fold and turn as a hook around the underlying bone as it scratched its edges.[25]

Even though the arrowheads and blades wounds could be cleansed, even perhaps with wine or a mixture of oil and honey, infection surely could kill a wounded who had been stuck in a sinusal cavity, as the Man of Pormose, to the contrary of Henry V, or in a non-lethal, fleshy, area.[26]

The long custom of chariotry also and perhaps helped developed some kind of knowledge on the treatment of amputation following the fall from a horse or a chariot crash, with the use of drains inside the stumps to avoid infectious liquids staying in the wounded flesh.

[23] De Backer 2012: 300; Corum 2002: 102-106; s. n., Battle of Waterloo Field Hospital Excavated.
[24] De Backer 2012: 305.
[25] Bill 1862: 371.
[26] Krug 2015: 202; Thrane 2006: 494.

A permanent camp could as well be pitched especially for the treatment of a very high valued person, as Essarhaddon and his *lupus erythematosus*, or the administration of the loot and of the prisoners.[27]

D.3. Convalescence at the Nearest Villages

For those who had the better chances to survive, places like small villages could be employed for their convalescence, as until very late in the 19th century, wounded troops could be billeted in the local inhabitants' houses.

Neo-Assyrian Wounded In Action belonging to the upper class, like officers or retainers, as Lord Scar Face, Skeleton 16 of Towton, could surely be billeted in more pleasant areas, like temples or the villas of the members of the local establishment.[28]

One could wonder if the soldiers had to care for themselves or if the Commanding Officers had to pay for them.

E. Base of the Neo-Assyrian Local Occupation

The Neo-Assyrian Wounded In Action that had the best chances to recover would be employed as an auxiliary force to occupy the recently conquered, or controlled, areas.

Meanwhile, the Commanding Officers in charge of these regions would have all the time they needed to upgrade those they thought best fit for that.

E.1. Local Administration of the Wounded In Action

Places where Neo-Assyrian Wounded In Action had been left in conquered lands surely fell under some kind of administration of the casualties that would have been centered in each new territory's head-city as a means to follow the quantity of surviving manpower available.

Guards would also have to protect the wounded against any possible retaliance attempts by the local people.

E.2. Protection of the Logistical Points

These convalescing soldiers would come in handy to support the depleted troops left here and there to protect and control the logistical points of the supply lines linking the campaigning Neo-Assyrian army to its supply bases.

[27] Parpola 2007: 232.
[28] Fiorato 2007: 113.

As they grew fitter for business, the Occupation Officers doubtly left the convalescent unemployed, and would have used the recently healed ones as lookouts or sentinels at the doors of storerooms, before sending them on patrol. The battle of Rorke's Drift, fought between British convalescent soldiers guarding an ammunition dump next to a ford, and three regiments of Zulu warriors trying to overtake it after their victory at Isandhlwana is a good comparative example of that kind of practice.[29]

E.3. Upgrade of the Soldiers

Getting better with the time and rest, the recently Wounded in Action would have take the time to re-train in their basic skills, like archery or fencing, and then perhaps learn new skills, like horsemanship, as to compensate for the useable specialists of such trades that would have followed the campaigning army.

Wounded archers and shield-bearers could learn each other's trades while on convalescence to turn the time, and so would have done the wounded riders that could have stayed within the other categories of soldiers.

So far, nothing could lead one to think that the Wounded In Action of each category, like infantry, chariotry and cavalry, or like archers and shield-bearers would have been treated separately in different facilities.

The loss of first-hand military experience, skills and knowledge surely would not be left over by the Neo-Assyrian High Command, as Napoléon did to recruit his Garde Impériale or his Junior Officers or as the British Empire did to "rule the world". Men like Horatio Nelson, both one-eyed and one-armed, Anthony Durnford with his lame left arm, Lord Raglan being one-armed, are good examples of severely wounded commanders still fighting after they recovered.[30]

For the Roman period, the similar history of Centurio Scaeva, who plucked his pierced eyeball out of its socket, was wounded at the shoulder and at the thigh, yet was raised to the rank of Primus Pilus by Cesar is another hint at the fate of the partly disabled veterans.[31]

A healed hole in the skull cap, as the skull of Lakish or of some mummies display, a missing eye, arm or leg surely did not hamper certain seasoned soldiers from becoming trainers for the recruits, clerks or guards in garrisons or temples. This required the behaviour stayed quiet, not as Phineas Gage was, but this has not been documented for the period concerned by this paper.[32]

[29] Knight 1993: 111.
[30] Hibbert 1994: 123; Sugden 2004: 515; Knight 2011: 121; Sweetman 2010: 121.
[31] Capdeville 1972: 602.
[32] Breasted 1994: pl. II, fig, 4.

E.4. Intelligence Gathering

As they were getting fitter, for those who could recover fully their physical and psychological aptitudes, recent Wounded In Action would surely spend some time in wider circles around their post during their free time, wandering or hunting.

While having fun at the local inns or places of pleasure, the soldiers would also be able to gather, and give, intelligence on the area and learn to know the neighbourhood in which they stayed.

E.5. Assistance for the Forthcoming Military Operations

Once fit for duty gain, the recent Wounded In Action could help the campaigning Neo-Assyrian army on its way back, if such was the chosen itinerary by the Commander-In-Chief. They also could assist the troops during the following military operations with their knowledge of the area and its whereabouts, acting as scouts.

E.6. Personal Consequences

Specific people with a strong will, a good health and a lot of luck could as well survive horrible wounds, though their behaviour would surely have been deeply affected afterwards and influenced the remaining of their whole lives, as Philip II of Macedon and Phineas P. Gage could show it.[33]

Prosthetic limbs and, eventually, eye or nose could as well be employed to sustain veterans, or even disabled civilians, although one would think this would have depended upon their wealth and status, as the false hand of general Marcus Sergius, the false eye of Shahr i-Sohkta from the Early Bronze Age, and the prosthetic leg of Turfan demonstrate it (Fig. 10).[34]

The Capua Leg, the depiction of a pegleg for a Cupid and the hand of Goetz von Berlichingen could help support the hypothesis that the prosthetics could have been manufactured by armourers or jewellers during the High Antiquity.[35]

Some crippled soldiers probably managed to get some kind of particular, basic, prosthetics whenever easily feasible, like a crutch, a pegleg or a bonze leg as those found in China and in the one found in China, a cap for the trepanised or a mask for the disfigured.[36] People like the Buthiers-Bulancourt Man for the Prehistory, the Hemmaberg Man, with the remains of his wooden foot, or the

[33] Macmillan 2002: 74-75.
[34] Belgiflio 2019.
[35] von Mechel 1815.
[36] Baker 2018: 200.

Longobard Man, with his knife blade fastened to his cut arm, both for the sixth century A.D., demonstrate that such kind of survival to amputation could happen.[37] The long experience of the Neo-Assyrian army in amputations probably gave them some time and opportunities to test treatments for amputations.

One should not set aside some kind of miraculous healing due to a strong health, a smart physician and luck, as Philip II, Carlton Burgan or Henry V clearly demonstrated.[38]

Veterans surely could as well survive with pieces of weapons stuck in the body, as was already demonstrated on Prehistorical remains and by men like Jacob Miller, who did so during 30 years with two bullets living in the big hole of his head.[39]

Other men could as well survive horrible wounds and stay considered fit for duty, as the legionary with pieces of his skull missing and yet amongst the soldiers who fought for Caesar, or not, as the Lacedaemonian who had to walk on four legs after a wound of the spine.[40]

Very Important People could as well have a lot of time and resources spent over their wounds to ensure they healed, as Lord Scar Face, the famous Skeleton 16 from Townton, with his terrible jaw, or Philip of Macedon, with his merged knee joint and dead eye, or some Vikings, with their scars on the head.

E.7. Social Consequences

The first question that comes to mind is how the Ancients dealt, both personally and socially, with the Post Traumatic Stress Disorder, the changes in their bodies and in their minds, and how they felt when they came back home.

Another interesting topic arises when it comes to study how the lives of the veterans could be organized or adapted to their return in the civilian society, as if any kind of importance was granted by common people to military achievements or glory in the contemporary Assyrian society.

The Assyrian Military Establishment perhaps had a kind of military retirement funding, or not, as this topic could be better understood with a deeper investigation, who perhaps also helped veterans to blend in among the civilians, building a home and a family.

Some other veterans, as today, could perhaps no reinsert themselves in the civilian society and became outlaws or mercenaries.

[37] Buquet-Marcon 2009; Binder 2016: 29-40; Micarelli 2018: 5, fig. 3.
[38] Gerber 2012: 178; Brandmeir 2018: fig. 1-3.
[39] Meyer-Steineg 1928: 6, fig. 2; Cullen 1884; Cordier 1990: 462-482.
[40] Ricard 1844: 568.

Nowadays, nothing is clearly known on the importance of the integrity of the body in everyday life's interactions with other humans, though it is quite the same for the afterlife, as the wooden prosthetic toes of Tabatekenmut, the daughter of Sennefer from the TT95, could display it.[41]

E.8. Medical and Political Consequences

So far, nobody knows precisely which rule applied to the choices of tortures provided to the enemy prisoners when they had to be punished by the army of Ashur. Assyrian doctors perhaps, dictated the Military Commanders in Chiefs which kind of corporal punishment had to be applied in order to be able to study the effects and tests some treatments on a free material who was plenty. This would have helped the physicians to improve their knowledge, practise their work hypothesis and develop new kind of instruments. The real mastery of torture surely and already was to keep one's patient alive the longest time possible while inflicting him as much as pain as possible, without having him faint. The huge catalogue of tortures given by Assyrians would support these preceding hypotheses.

In the same time, the political consequences of the campaign surely were enhanced by its demonstration of force, so everyone would be winning something in the process.

E.9. Military Improvements

The study of the wounds inflicted and received by their soldiers would have helped the doctors to find better ways to harm and protect the body, as the hook on the arrowheads would demonstrate and as the development of the basic tools of a doctor, as discovered in Nineveh, could show.[42]

The massive employment of the broad belt would be a good supporting element for this point, as Dr. Bill mentions the employment of a thick blanket that was rolled around the waist by the Mexicans around their abdomen to provide protection against the arrows of the Indians.[43] Interestingly, this seems to fit with the role devoted to the broadband worn by most of the Assyrian soldiers between the reigns of Assurnasirpal II and Assurbanipal.[44]

[41] Wagle 1994: 999-1000.
[42] De Backer 2012: 220-232.
[43] Ennis, https://fr.scribd.com/document/97273973/Arrow-Wounds-and-Treatments-on-the-Western-Frontier.
[44] Among hundreds of other examples: see Wallis-Budge 1914: pl. XIII, a; King 1915: pl. XLIX, Bd. IX. 2; Barnett 1962: 170; Albenda 1986: pl. 98; Barnett 1998: pl. 299; Barnett 1976, pl. XL.

Conclusion

To sustain their perpetually campaigning armies, the Neo-Assyrian surely used even the most basic ways and means to restore their health, physical abilities and warlike potential to the maximum of soldiers.

Without more available data to use in the research on that topic, this paper seems to be a good starting point that only requires to be developed and improved.

Barbers and physicians had to learn their trades, on the one side, somewhere, and practice or experiment on the other side, with the wars being the easiest, fastest and cheapest way to do so, as it has always been.

The Neo-Assyrian Military Meritocracy needed time for the Wounded In Action to heal, for the Commanding Officers to write their list of proposals for promotions, decorations and specializations of their soldiers, that the King or his representative had to ratify on their way back of at a later moment.

Strangely enough, amputees or disabled veterans are not depicted in the visual monuments, mentioned in the textual records, not even proposed in the material discoveries, thought surely some Assyrian V.I.P.'s would have needed crutches or sticks in their late years.

Bibliography

Albenda, P. 1986: *Le palais de Sargon d'Assyrie*. Paris.

Baker, J. L. 2018: *Technology of the Ancient Near East: From the Neolithic to the Early Roman Period*. London.

Baker, P. 2009: "Archaeological remains as a source of evidence for Roman Medicine". ucl.ac.uk/~ucgajpd/medicina%20antiqua/sa_ArchaeologicalRemains.pdf.

Barnett, R. 1962: *The Sculptures of Aššur-Nasir-Apli II (883-859 B.C.), Tiglath-Pileser III (745-727 B.C.), Esarhaddon (682-669 B.C.) from the Central and South-West Palaces at Nimrud*. London.

— 1976: *Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627 B.C.)*. London.

Barnett, R. et al. 1998: *The Sculptures from the South-West Palace of Sennacherib at Nineveh*. London.

Belfiglio, V. 2019: *Roman Military Medicine: Survival in the Modern Wilderness*. Cambridge.

Bill J. H. 1862: "Notes on arrow wounds", *American Journal of Medical Science* 154: 365-387.

— 1882: “Sabre and bayonet wounds; arrow wounds”. In J. Ashhurst (ed.): *International Encyclopaedia of Surgery: A Systematic Treatise on the Theory and Practice of Surgery by Authors of Various Nations*. New York: 101-117.

Binder, M. 2016: “Prosthetics in antiquity. An early medieval wearer of a foot prosthesis (6th century AD) from Hemmaberg/Austria”, *International Journal of Paleopathology* 12: 29-40.

Booton, H. 2004: *The Unlikeliest Hero: The Story of Desmond T. Doss, Conscientious Objector Who Won His Nation's Highest Military Honor*. Mountain View.

Brandmeir, N. et al. 2018: “The Leg Wound of King Philip II of Macedonia”, *Cureus* 10/4. doi:10.7759/cureus.2501.

Breasted, J. 1991: *The Edwin Smith Surgical Papyrus. Volume 1: Hieroglyphic Transliteration, Translation, and Commentary, 2nd ed.* Chicago.

Buquet-Marcon, C. et al. 2009: “A possible Early Neolithic amputation at Buthiers-Boulancourt (Seine-et-Marne), France”, *Antiquity: Project Gallery 83* (322). antiquity.ac.uk/projgall/buquet322/.

Capdeville, G. 1972: “Le centurion borgne et le soldat manchot”, *Mélanges de l'école française de Rome* 84/1: 601-621.

Cordier, G. 1990: “Blessures préhistoriques animales et humaines avec armes ou projectiles conservés”, *Bulletin de la Société Préhistorique Française* 87: 462-482.

Catapano, G. 2012: “Artificial Organs”. In Z. Abu Faraj (ed.): *Handbook of Research on Biomedical Engineering Education and Advanced Bioengineering Learning: Interdisciplinary Concepts, Volume 2*. IGI Global: 60-95.

Corum, M. 2002: *Waterloo*. London.

Cullen, H. / Bill, H. R. 1884: “4477”. In: *Index to the Reports of Committees to the House of Representatives for the First Session of the Forty-Eighth Congress, 1883-1884 in Seven Volumes, vol. 3*. Washington: Report 895 (United States Congressional Serial Set, Volume 2255).

Daremberg, Ch. 1865: “Études d'archéologie médicale sur Homère: condition des médcins, anatomie – Physiologie – Chrirugie – Médecine”, *Revue Archéologique* 12: 95-111; 338-355.

De Backer, F. 2009: “Cruelty and Military Refinements”, *Res Antiquae* 6: 13-50.

— 2010: “Fragmentation of the Enemies in the Ancient Near East during the Neo-Assyrian Period”. In A. Michaels (ed.): *Ritual Dynamics. Usurpation Ritual. Vol. III: State, Power and Violence*. Wiesbaden: 393-412.

— 2012: *L'art du siège néo-assyrien*. Leiden.

— 2020: “Go tell the Assyrians, thou who passes by, that here, obedient to their laws, we lie...”, *Historiae* 17: 25-91.

— 2022: “Le Roi assyrien est Apsu: tout baigne dans l’huile”, *Res Antiquae* 19: 97-122.
— Forthcoming a: “Praise the Lord, and Pass the Ammunitions”.
— Forthcoming b: “Neo-Assyrian Gladiatoria”.
Deiss, J. 1989: *Herculaneum: Italy’s Buried Treasure*. London.
Dothan, M. 1971: *Ashdod II-III. The Second and Third Seasons of Excavations 1963, 1965 Soundings in 1967*. Jerusalem.
Ennis, L. et al. “Arrow Wounds and Treatments on the Western Frontier…a fatality greater then that produced by any other weapon”. fr.scribd.com/document/97273973/Arrow-Wounds-and-Treatments-on-the-Western-Frontier.
Fiorato, V. et al. 2007: *Blood Red Roses: The Archaeology of a Mass Grave from the Battle of Towton AD 1461*. Oxford.
Gerber, D. 2012: *Disabled Veterans in History*. Ann Harbour.
Getz, F. 1998: *Medicine in the English Middle Ages*. Princeton.
Gruet, M. 1941: “À propos de la Trépanation au Néolithique”, *Bulletin de la Société Préhistorique de France* 38: 164-170.
Haas, N. 1971: “Anthropological Observations on the Human Remains found in Area D”. In M. Dothan (ed.): *Ashdod II-III. The Second and Third Seasons of Excavations 1963, 1965 Soundings in 1967*. Jérusalem: 212-213.
Heckel, A. 2003: *Emergence de la médecine en Mésopotamie*. Sciences du Vivant [q-bio]. Université de Lorraine, ffhal01732845f.
Hibbert, C. 1994: *Nelson: A Personal History*. Reading.
Hippocrates. *Ancient Medicine. Airs, Waters, Places. Epidemics 1 and 3. The Oath. Precepts. Nutriment*. Translated by W. H. S. Jones. Loeb Classical Library 147. Cambridge.
King, L. 1915: *Bronze Reliefs from the Gates of Shalmaneser King of Assyria B.C. 860-825*. London.
Knight, I. 2011: *Zulu Rising: The Epic Story of Isandlwana and Rorke’s Drift*. London.
Krug, I. 2015: “The Wounded Soldier: Honey and Late Mediaeval Military Medicine”. In L. Tracy / K. DeVries (eds.): *Wounds and Wound Repair in Mediaeval Culture*. Boston: 194-214.
Larrey, D. 1803: *Relation historique et chirurgicale de l’expédition de l’Armée d’Orient en Égypte et en Syrie*. Paris.
Lejeune, L. F. 1851: *Souvenirs d’un officier de l’empire, Volume 1*. Paris.
Macmillan, M. 2002: *An Odd Kind of Fame: Stories of Phineas Gage*. Cambridge.
Malgaigne, J. F. 1840: *Introduction aux Œuvres complètes d’Ambroise Paré, t. 1*. Paris.
von Mechel, C. 1815: *Die eiserne Hand des tapfern deutschen Ritters Götz von Berlichingen*. Berlin.

Meyer-Steineg, T. 1928: *Geschichte der Medizin im Überblick mit Abbildungen*. Paderborn.
Micarelli, I. 2018: "Survival to amputation in pre-antibiotic era: a case study from a Longobard necropolis (6th-8th centuries AD)", *Journal of Anthropological Sciences* 96: 1-16.
Milne, J. 1907: *Surgical Instruments in Greek and Roman Times*. Oxford.
Olmer, F. 2009: "La médecine dans l'Antiquité: professionnels et pratiques", *Sociétés & Représentations* 28: 153-172.
Parpola, S. 2007: *Letters from Assyrian Scholars to the Kings Esarhaddon and Ashurbanipal, Volume 2*. Winona Lake.
Peyrefitte, R. 1981: *Alexandre Le Grand*. Paris.
Potts, D. 2012: *A Companion to the Archaeology of the Ancient Near East*. Hoboken.
Remblière, M. 2019: "Lorsque les corps révèlent la violence guerrière: les blessés de l'Iliade et des traités hippocratiques". In: *Les Annales de Janua. Actes des Journées d'Étude*, n° 7. Publication en ligne.
Ricard, D. 1844: *Oeuvres morales de Plutarque, t. 4*. Paris.
Salazar, C. 1999: *The Treatment of War Wounds in Graeco-Roman Antiquity*. Leiden.
Stieglitz, R. 1981: "A Physician's Equipment List from Ugarit", *Journal of Cuneiform Studies* 33/1: 52-55.
Stillwell, B. 2002: *An investigation into cranial trauma from the Anglo-Saxon cemetery at Sedgeford, Norfolk, UK*. Undergraduate dissertation, Bournemouth University.
s. n. Battle of Waterloo Field Hospital Excavated, Archaeology. A publication of the Archaeological Institute of America, Wednesday, July 17, 2019.
archaeology.org/news/7831-190717-belgium-field-hospital.
Sugden, J. 2004: *Nelson: A Dream of Glory, 1758-1797*. London.
Sweetman, J. 2010: *Raglan*. London.
Thrane, H. 2006: "Swords and other weapons: technology, treatment and contexts". In H. Thrane et al. (eds.): *Warfare and Society: Archaeological and Social Anthropological Perspectives*. Aarhus: 491-504.
Vogel, C. 2003: "Fallen heroes? Winlock's 'slain soldiers' reconsidered", *Journal Egyptian Archaeology* 89: 239-245.
Wagle, A. 1994: "Toe Prosthesis in an Egyptian Human Mummy", *American Journal of Radiology* 162: 999-1000.
Wallis-Budge, E. 1914: *Reign of Ashur-Nasir-Pal, 885-860 B.C.* London.
Winlock, H. 1945: *The slain soldiers of Neb-hep-et-Rē'Mentu-hotpe*. New York.

Figures

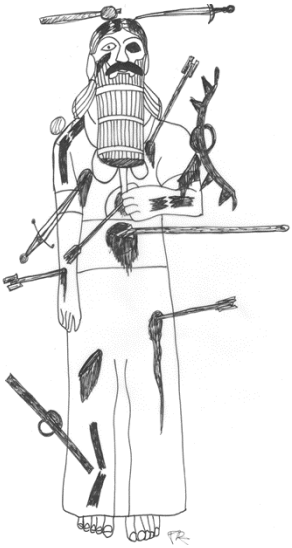

Fig. 1: Human figure inspired by the Assyrian visuals presenting the basic wounds encountered on a battlefield (Drawing by the author)

Fig. 2: Scythian warrior bandaging the leg of another man (Olmer 2009: 6, fig. 19)

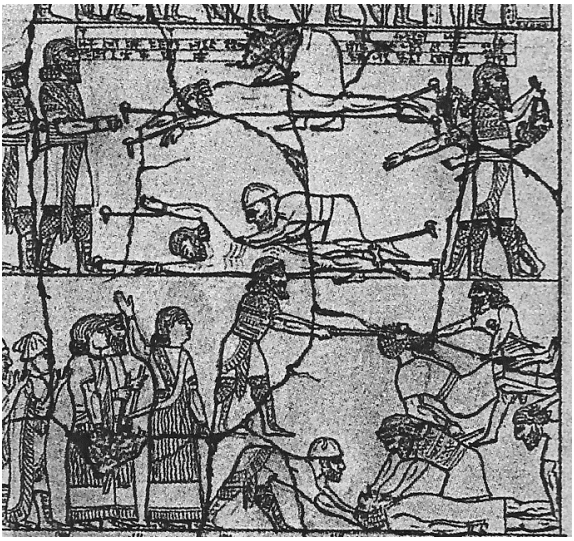

Fig. 3: A possible depiction of a Neo-Assyrian physicican and his helper holding the head of a victim under Sennacherib (Barnett 1998: 300)

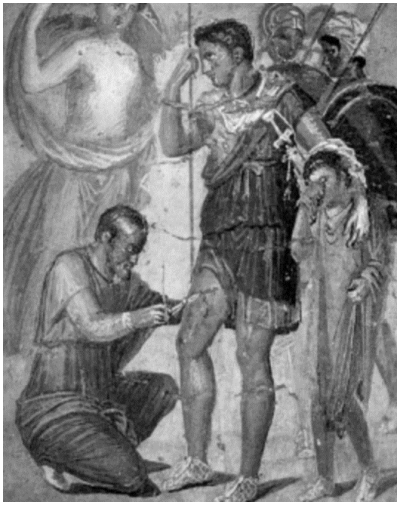

Fig. 4: A painting from Pompei depicting a man trying to pull an arrow out of the thigh of Aeneas with forceps (Olmer 2009: 22, fig. 13)

Fig. 5: Achilleus scraping the rust of his spearhead on the wound it inflicted to Telephus (Deiss 1989: 58)

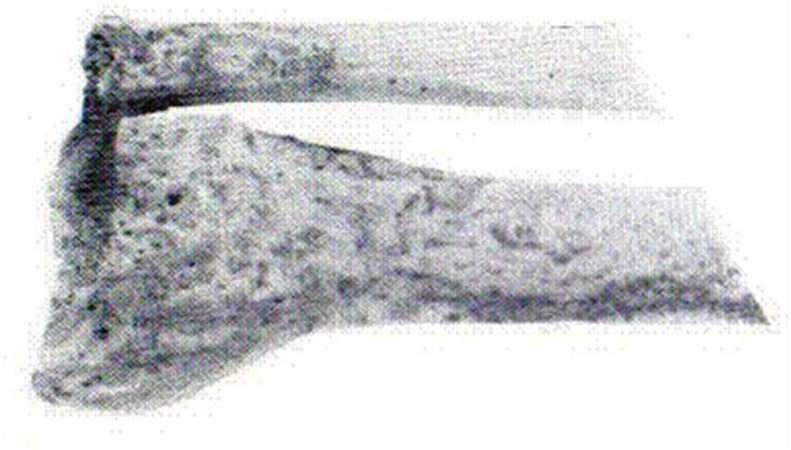

Fig. 6: An amputated right wrist found in Ashdod (Dothan 1971: pl. C, 2)

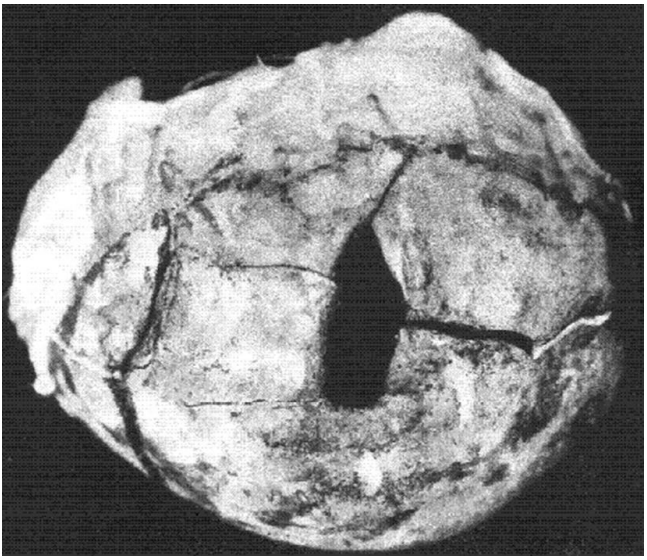

Fig. 7: A trephanated skull from Lakish presenting traces of healing
(Ussishkin 1980: 59, fig. 53)

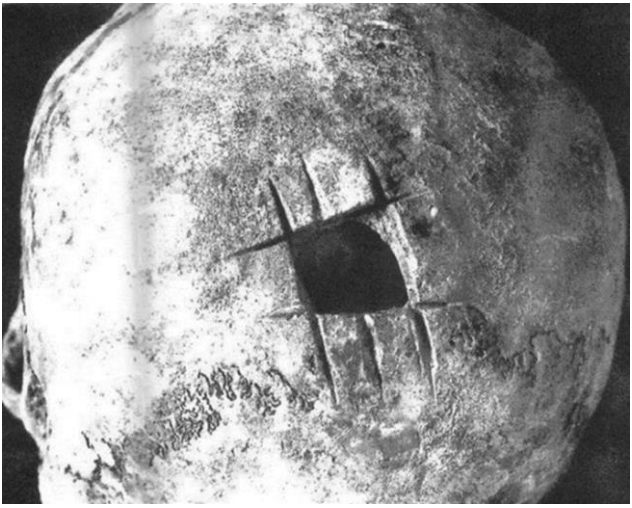

Fig. 8: A trephanated skull from Lakish not presenting traces of healing
(Ussishkin 1980: 58, fig. 52)

Fig. 9: Surgical instruments found in Nineveh and said to date from the Babylonian period (Meyer-Steineg 1928: 19, ill. 10)

Fig. 10: Amputee bearing a stilt leg prosthesis on an Ionic vase (Catapano 2012: 68, fig. 5)