ELIE PAUL COHEN

# Army Doc: Mission Afghanistan

## Translated from the French by Jessica Levine

*At the improbable age of 54, Dr. Elie Paul Cohen left his work as a civilian physician in London and Paris in order to become a temporary French army emergency doctor. His knowledge of both the French and British health systems and his dual citizenship made him an ideal candidate to serve in the medical corps at the British military Camp Bastion in Afghanistan. His mission: to study and apply in the field the most recent and advanced paradigms for treating severely wounded soldiers, called Damage Control Resuscitation, with the aim of writing a report for the French military. Thus, in 2011, this untested French soldier found himself 676 kilometers south of Kabul, suddenly plunged into the furnace of a British-American military base located right in the middle of Helmand Province. His daily job: to work with medical teams that have only a handful of minutes to try to save young soldiers, most often mutilated by homemade bombs set off with very sophisticated means, in a war that combines medieval strategies with the latest technology. Dr. Cohen brought to his work the specialized training that emergency doctors receive in France, where the rescue workers serving in ambulances are doctors and not simply medics or paramedics. [Trans. Note]*

SOMEWHERE IN THE HELMAND DESERT. It's 9:30 in the morning. The helicopter has just left the British base of Camp Bastion for a medical evacuation.

It has to be done very fast. It's an absolute emergency. An A-level priority. The confrontation, in the Green Zone, was violent. The patrol fell into an ambush. One of the soldiers stumbled on a mine that the enemy detonated from a distance. As he was seriously wounded, the prognosis for his survival looks poor.

Including the time needed to check the medical equipment and arms, it took the team less than nine minutes to get into a flying machine and take off. It's a Chinook. A CH-47. It belongs to the mythic line conceived by Boeing and used by the American army in the Vietnam War. The Royal Air Force uses the Chinook to transport troops and to evacuate the wounded. Its size is impressive. When its khaki cabin moves through the skies with its two propellers

whirring, one in the front and the other at the rear, it looks like a giant insect that has stepped out of the dinosaur era. As though war were sending us back into prehistory. . .

On the inside, in the shadows, the pilot and his co-pilot, the MERT—the Medical Emergency Response Team—and the infantry soldiers at their protective posts behind their machine gun batteries, are ready to intervene if attacked. Every movement in the Afghan sky invites danger. The rebels have ground-air missiles they can use at any moment. Standard equipment for everyone includes helmets, bullet-proof vests, anti-UV sunglasses, ear plugs to mute the noise of the helicopter, HK assault weapons and 9 mm Sig 226 pistols.

From the moment I arrived at Camp Bastion, I felt electrically connected to the MERT. In this team I found the spirit of the SAMU—the French emergency corps—that I knew so well. These saviors have been trained for combat. Here, the so-called rebels zap the Geneva Conventions. It's a victory for them when they hit a doctor or a nurse, a way of weakening the troops' morale. A soldier is reassured by the knowledge that he'll be taken care of in the event he's badly wounded. It supports his efficiency. The enemy's tactics are vicious, but logical. War gives "permission to kill." Doctors and nurses are there to minimize the collateral effects of this legalized violence, but they must know how to defend themselves as well as how to save lives.

The flight has lasted fifteen minutes. The helicopter is about to set down in the combat zone, in the desert, in the middle of nowhere. Major Rob signals his men to stay ready. A doctor anesthesiologist, he is the officer in charge of the MERT. Tall, blonde with blue eyes, he has a manner that is both straight-forward and flexible, in the way of Englishmen of his breeding. He has natural authority.

The din of the motor and propellers makes communication difficult, but everyone knows his job. The rear door is completely open. The heat and dust are intense. Four infantry soldiers exit quickly to secure the zone. Mike, one of the paramedics, goes next. The other members of the team remain on board, because the risk of being taken down by a sniper is too great.

At the same time, the first-aid workers of the unit in question approach with the wounded soldier on a stretcher and help get him on board. The manoeuver is not supposed to take more than 90 seconds. That is the recommended maximum amount of time in order to minimize risks from the enemy.

At first glance, everyone understands that this polytraumatized soldier has minimal chances of survival. The man is in a coma. When it exploded, the mine cut off his two lower legs at the level of the thighs. The testicles have certainly been hit as well. His right forearm has been half torn off. Tissues have been burnt, some to a cinder. The pelvis and abdomen have also been damaged.

On the ground, the nurse and combat rescue workers have already removed his helmet to free his upper breathing passages and to put in place a cervical collar so that any eventual vertebral fractures will not be aggravated. They also placed a tourniquet on each thigh, close to the wounds, which they stuffed with compressive hemostatic dressings intended to slow or stop bleeding, then they treated him for pain with a morphine injection. The unit nurse has used a random piece of paper to improvise a record sheet with notes on the type of wounds and initial clinical data. They are succinct.

The young fighter is still breathing, but with difficulty. His condition is unstable. The carotid pulse is present, but the radial pulse cannot be felt. As a consequence of the blast from the explosion, he must be still be bleeding abundantly in the thorax and abdomen, because he is very pale. The remaining portions of his extremities are marbled and cold. His oxygen saturation level and blood pressure are very low. He is in hypothermia. His heart is beginning to show signs of suffering on the monitor. His Glasgow Coma score—a system used to indicate level of consciousness—is at 3, the lowest possible, and his right pupil is a-reactive and dilated, indicating serious cerebral damage.

There isn't a moment to lose. Even if the case seems like a lost cause, one must try everything and stick to the protocol. Everyone around the patient is involved. Care measures are begun as the racket made by the helicopter taking off once again makes it hard to hear each other, so communication is effected through sign language. The lack of comfort and light are unimportant. The scene is harsh.

Major Rob directs the operations. He prepares the intubation kit while Mike and Jim, the two paramedics, prepare the sites for the intraosseus infusion, one in each shoulder and the third in the sternum. Phil, the nurse, will inject the resuscitation drugs at those sites. Ketamine and Celocurine for intubation; ketamine again for pain; Fentanyl for sedation; Augmentin to prevent infection; tranexamic acid to slow down bleeding; red corpuscles and plasma warmed to human temperature. The blood transfusion is massive. That is the key treatment, with the goal being to fight against the following triad of killers: hypothermia,

acidosis, and coagulation disorders. This is the famous Damage Control Resuscitation, dear to the British. The patient is finally intubated, ventilated, and transfused.

The return trip takes a quarter of an hour, during which the condition of the patient deteriorates in spite of the management of respiratory passages and the massive transfusion. He dies as soon as he reaches the hospital. His name was Greg. He was 24 years old.

Everyone at Camp Bastion is dismayed. Rob addresses us: "We will have to announce this soldier's death to his family in England before the media gets involved. Communication networks will temporarily be cut."

I say to Rob that death was the best possible outcome for this soldier. Wouldn't life have been unbearable for him without his legs, with his testicles damaged and only one functioning arm? Rob agrees, but then his training as an army doctor takes over. "Your point of view is defensible, but ethically, we are obligated to try to save everyone. And then one must avoid deaths on the ground. Western public opinions requires—"

"Dirty devices, those IED's," Mike interrupts, referring to Improvised Explosive Devices. This red-haired Scotsman is squarely built and likeable. He has already served in Iraq. Visibly moved by the situation, he continues his explanation. "These damn mines are very destructive and the cause of most of the big combat injuries. They're homemade or collected in the zones abandoned by the Russians after the war they lost against the Mujahedeen in the 1980s. The goal of the insurgents wasn't to kill, but to seriously mutilate troops in order to deal a blow to the morale of soldiers and Western public opinion. This is also a war of nerves and propaganda. Their technology is constantly improving thanks to allied powers."

"Which ones?"

"Pakistan and China," Phil answers from behind his technician's eyeglasses. A wry smile masks his anguish. "These devices are detonated from a distance. The enemy uses mobile phones to set them off, they explode when the soldiers are coming through."

"One mine can also conceal another," adds the sturdy Jim. His cockney accent is typical of what might be heard in East London, and his blue-green gaze goes straight to its target. "The British troops know this well because of where they've landed. The Helmand is our theater of operations. One of the hardest in Afghanistan. Our soldiers are young. They're under orders to apply the counter-insurrection strategy the Americans have dictated. Make war against the insurgents and peace with the population. That's the new doctrine installed in Afghanistan by NATO's chief of operations, General Petraeus."

I nod, having learned during my training that the inspiration for this theory came from David Galula, a French officer, now deceased, who specialized in guerilla warfare. Threatened by the Nazis during World War II because he was Jewish, he joined the Resistance, then the American army under the orders of General Patton. In 1949, stationed in China as an intelligence agent, he observed the insurrectionary tactics employed by Mao, which would be used again against the French army in Indochina and Algeria.

"Who are these insurgents, Rob? Are they all Afghans?"

"It's a melting pot, Elie. Most of them are Taliban descendants of the Pashtuns, a dominant ethnic group in Afghanistan. Taliban means 'student of the book.' These Sunni fundamentalists come out of the Pakistani Koranic schools, real brain-washing machines. In 1893 the British drew the Durand line and divided their territory, Pashtunistan, into two parts. One sector is in the south of the Afghanistan area we're in now, the other is in the tribal zones in the north of Pakistan, which provides support as part of a deep strategy intended to provide security in the event of a conflict with India. The Pashtuns are at the same time clamoring for unification, which doesn't improve matters any."

"And the others?"

"They belong to Al Qaeda and those fighting in the movement for international Muslim integration, rallying to intensify Jihad against the crusaders that we're supposed to be … They come from Chechnya, the Middle East, the Horn of Africa, the Maghreb, France, the UK, and elsewhere."

"I understand, especially since we are with NATO a coalition of almost fifty nations."

"Yes, it's a world war of a third type and localized, a war in which religion plays a predominant role. Not only with Muslims but with extremists of all kind. They fan the fire."

"But why is the fighting here?"

"It's an American war, Elie. Central Asia presents big geopolitical stakes. Afghanistan has always been a corridor between Europe and Asia via the Silk Road. For Russia, it provides access to the warm seas. Iran and the Persian Gulf aren't far away. There are huge gas and oil reserves in some of the surrounding countries and in the Caspian Sea. Right now people are talking about rare metals in the Afghan earth. Not to mention opium. . ."

"Opium?"

"At least 80% of the world's heroin comes from Afghanistan. The Green Zone, where we went to get that poor soldier, contains one poppy field after another, extending to the

horizon toward Pakistan and Iran, through which most of the trafficking passes toward Europe, Russia and the USA. The mafias and the arms traffickers are also involved in this big game."

"The British have also fought here, Rob?"

"Yes, three times between the 19th and 20th centuries. These confrontations pitched the British Empire against Russia, the two of which fought to acquire sole control of the region. Today, the Americans are taking a turn. It's a difficult game and requires a subtlety that Texans don't always cultivate."

"Which maybe explains the quagmire we're in today?"

"Partly. During the Cold War, the USA supported the Afghan Mujahideen against the Russians, then the fundamentalist Talibans, joined by Bin Laden. For thirty years Afghanistan has been a reservoir for modern Jihad."

"The Americans are fighting them right now!"

"That's right. Commander Massoud, whom the French like a lot, paid the price with his life when he was assassinated by terrorists two days before 9/11. Since the end of the Cold War, the world has returned to the geopolitics we inherited from World War I."

"The Sykes-Picot Agreement?"

"Yes, the division of the Ottoman Empire drawn up by French and British diplomats. Many of our contemporary conflicts have come out these agreements, in which one of the stakes was oil."

While Rob talks, I wonder who's going to benefit from all this. How can Westerners imagine they might make peace with these populations whose countries they've once again invaded? History repeats itself with variations, as though obeying a law of recurrence. Two different civilizations and worlds look at each other without understanding. But there's no time to question what we're doing here, for the team, on duty until tomorrow morning, has to leave again for another rescue operation. Two Afghan children have been hit. They must be evacuated rapidly. In spite of their failures and the harshness of situations encountered, the MERT love their job and are always happy to save lives whenever they can.

Because someone has to do the job. War has never been clean, though the Yankees would like us to believe otherwise. Today like yesterday, the doctor at the front is there to relieve the suffering of victims. In the past hundred years, the shape of conflicts has changed.

At the beginning of the 20th Century, 80% of the wounded and lost were soldiers. Today, 80% of victims are civilians.

This is the era of wars that are asymmetrical, permanent, and without any front lines.

Five o'clock the next morning. My alarm rings. Opening my eyes, I see the light of dawn through the opaque glass of the skylight that's my only window. My roommate still seems to be asleep. His name is Bob, he's one of the two internists in the British health service deployed at camp Bastion. Our room resembles a ship cabin. It's small, long, painted white, and air-conditioned. A bunk bed, two desks and two chairs are the only furniture. For security reasons, openings to the outside are reduced, and most of the time we use neon lighting to brighten the room. The atmosphere is Spartan. Our pale gray, prefabricated barracks are surrounded by anti-mortar cement walls. Located not far from the hospital, they shelter the British and American teams of doctors and surgeons who are lodged two or three to a room. Men and women are separated, their bathrooms, too. The Filipino workers in charge of maintenance attend scrupulously to hygiene.

I get up without making too much noise and go straight to the bathrooms. Ever since my arrival, two months ago, I've stuck to the same morning routine, being one of the first to wake up in order to take advantage of toilets and showers when they're still clean. Back in my room, I find Bob getting ready to go for his morning jog. You have to go running very early at Camp Bastion because the heat gets intense fast. Bob is a big blonde guy, around thirty years old, always smiling and a straight talker. A career army doctor, he's on his second tour of duty in Afghanistan. His mission is to guide me and facilitate my integration into the team by helping me with daily problems, and he's doing it well.

"Hi, Elie," he says. "Last night, when I came back from my shift at the hospital, you were sleeping so soundly I didn't want to wake you."

"Yes, it was an intense day, I was so exhausted I just fell into bed. I'm running to get breakfast. I'll see you see you at the hospital."

The cafeteria is right next to our barracks. Breakfast is served from 0600 to 0800, lunch from 1200 to 1400, and dinner from 1800 to 2000. After a rapid English breakfast, I join the emergency service. It communicates directly with the ambulance area, at the entrance to the hospital.

24 hours a day, 7 days a week, three members of the medical staff, having different specialties, rotate every eight hours. Harry is already ready to go with his emergency personnel.

"Hello Elie, you slept well?" he asks.

"Like a baby, I was totally out."

"Good! We're expecting a serious injury in 15 minutes. He stumbled on an IED. According to MERT," he said, "he's lost at least a leg and a hand."

We hear a helicopter landing on the strip nearby. Suddenly everyone looks serious. We all know that in a few minutes we'll have to act, and fast. In the moment, I am one with these teams of ultra-competent doctors and nurses, who are caring and strong at the same time. Harry has made sure that my integration has gone smoothly and my training in York is serving me well. This is no place for sentimentality, which can only get in the way of efficiency. Our only goal is to save whatever is salvageable. One often has to go into a dissociative state in order to tolerate the horrific sight of these mutilated men, some of whom have flesh shredded by land mines.

But there's no time for reflection, for MERT is already there, transporting the wounded man on a green khaki stretcher with an iron frame. In their British army uniforms, harnessed like fighters with bullet-proof vests, helmets, and assault weapons strapped on their shoulders, they're covered by desert dust, their faces are perspired from the heat and the rush of adrenalin.

The protocol begins. It's impressive, always the same, as strictly ruled as music paper, and unrolls like a true psychodrama, in an almost religious silence.

The MERT doctor, assisted by his nurse and two medics, begins by giving us a detailed clinical description of the patient's condition and the measures taken during his evacuation. He has already transmitted some of these facts during the helicopter transport via secure satellite telephone. A nurse has noted them down on a board hung on the wall, near the resuscitation room right near us. With this protocol, used for maximum efficiency and speed of execution, everyone is already aware of the context of situation.

This soldier is British, 26 years old. He was patrolling on foot when the mine exploded. He's covered with blood. His right leg has been ripped off just under the knee. His right hand has also been wounded. He's unconscious, intubated, ventilated and receiving a blood transfusion. I'm suddenly aware of the smell of human flesh altered by explosives and the heat

of this climate. I'm having a hard time getting used to it, and I confess I still smell it now as I write these lines.

On the ground, the protocol for the management of hemorrhagic states of shock has been applied, as usual. The combat nurse has placed a tourniquet on his lower limb and, at the same time, stuffed the wounds with hemostatic dressings. These tourniquets developed by the Israelis, were invented by the Russians. You simply have to turn a kind of handle attached to the straps to tighten and compress the tissues in order to stop the bleeding. During the helicopter transport, the MERT team started reanimation and succeeded in stabilizing the wounded soldier.

Trapped in this war, in this extreme situation, I find myself facing all the big questions about the human condition. Life and death, suffering, handicap, hate and violence, love, too.

And God in all this?

The devil, for sure!

The exploitation of ignorance and religion. The collision of different civilizations. Geopolitics, economic interests, the business of war, the mafias and trafficking of many kinds, all in some crazy melting pot. Why did this boy, barely out of adolescence, have come to lose his leg in Afghanistan, far from his country, in this bloody war, without a front line? He could be my son. He'll be handicapped *ad vitam aeternum*. This human sacrifice seems insane and is part of the sordid game we've embarked upon.

In the meantime, one must act to save him. The resuscitation continues. Two teams are on site. The first consists of the actors using the defibrillator, the wounded soldier on his stretcher, and the medical personnel, myself included. The observers are in the other group—an evaluating team composed of emergency doctors, anesthesiologists-resuscitators, surgeons, male and female nurses and members of the administration. They stand apart, in the little hallway that connects the emergency area to the operating unit, behind a yellow line drawn on the ground, which they mustn't cross. From behind this symbolic border, they analyze our management of the wounded. Their notes will serve to improve protocols.

On the other side, the drama unfolds in silence. The mood is meditative, almost religious, because death is never far away. Concentration is at a maximum. A little schizo, I continue to split myself into two in order to tolerate this hyperrealist situation and to put my humanity at the service of this wounded soldier. The best way is to concentrate on one's task and gestures. Elie, the army doctor, has become a technician devoid of the emotions that a

normal being would experience faced with this scene. There's a sense in which I'm in a state subordinated to the team that's focused on saving this life.

About twenty doctors and nurses are gathered around the victim on his stretcher. About half are British and half American. There are as many women as men. All are wearing their summertime military outfits. Canvas pants, tee-shirt and Rangers. On top of that, they wear a lead vest covered with a light green plastic apron designed to protect them from X-rays and blood. They have their latex gloves on. I'm wearing the same gear, but in the colors of the French army.

In a war zone, the idea of asepsis exists of course, but it is slightly different from what you might see in the emergency services and surgical wards of European and American hospitals. In this environment and these very special circumstances, things pass that wouldn't be allowed in a civilian context. Only efficiency and results count. And it works.

We're in the second stage of the Damage Control Resuscitation protocol, the first having been started by the MERT team on the ground. It's the British who developed this protocol specific to Camp Bastion. Everything is meticulously coded. Large quantities of blood have already been ordered. The priority is to minimize the collateral effects of hemorrhagic shock.

After having transferred the unconscious soldier from the stretcher to the resuscitation room while at the same time checking for the presence of other wounds, the treatment begins. The measures are rapid and precise, executed without panic. A real ballet, coordinated by the emergency doctor at the foot of the stretcher; he's called the Primary Survey Doctor and is the true orchestra conductor directing the proceedings. He oversees the operations but doesn't participate in them directly. In the event of a large influx of wounded troops, an anesthesiologist-resuscitator or a surgeon can take on this role. Everyone knows what he or she has to do. One gesture per doctor or nurse. The sequencing of tasks reminds me of Taylorism applied to medicine.

The anesthesiologist-resuscitator and his anesthesia assistant, who is not a doctor, stand right next to the polytraumatized patient. Their usual job is to introduce a tube into the respiratory passage and a catheter into the central venous system. In the present case, the patient has already been intubated in the helicopter. His ventilation is functioning well. So they insert the central catheter in order to replace the intraosseous infusion.

To their right stands an emergency doctor, the Secondary Survey Doctor. He tracks the clinical state of the victim and his vital signs looking for secondary wounds that haven't yet been listed. Today, that's my job.

Then, around this personnel, there are nurses, paramedics, combat medics, and medical auxiliaries in charge of infusing, injecting resuscitating drugs and transfusing fractions of human blood with the help of *Level One*, in which machines propel under pressure pouches of red corpuscles, fresh frozen plasma and platelets that have been warmed to 42° C, permitting the rapid refilling of the victim who has already lost a lot of blood and needs to be treated for hypothermia.

The radiologist and his technical assistant are positioned behind me. They are ready for the thoracic-abdominal-pelvic X-rays and sonograms that will be interpreted on the spot. The so-called runner is in charge of blood and the laboratory tests. He's the liaison with the doctor lab technician. The surgeons (orthopedic, vascular, visceral, and plastic) are already present in order to evaluate the state of the wounds and to plan the surgery.

Next to the Primary Survey Doctor, a scribe verifies and notes down that all the procedures have been followed properly. Each member of the team announces when his or her task is done. This medical-legal information will serve to improve the care and elaboration of statistics, which are important to Anglo-Saxons.

From behind the dividing line, Harry and the members of the administration survey the operating room, prepared to organize the repatriation of the soldier to his country of origin or, in the case of death, to inform his family. In the latter case, the communication between the camp and the civilian world will be cut off until his next of kin is notified, so that the death-loving press won't get wind of the news beforehand.

Once the clinical state of this young soldier has been stabilized, he's rapidly transferred to radiology in order to have an entire *Body Scan,* to identify any associated internal lesions. The entire attending team, still focused and silent, accompanies him in a cortège toward the radiology department. This procession has a sacred feeling.

He will then go to the operating sector for hemostasis and cleaning of the wounds, which is called Damage Control Surgery. Since the arrival of the MERT, the treatment of the patient has taken twenty-five minutes. Altogether, the process of his repatriation, from combat zone to the surgical table, has taken less than an hour. He will survive, after the amputation of his right leg and his hand on the same side, and will be repatriated 48 hours later to England,

destination Queen Elizabeth Hospital of Birmingham, the equivalent of the Percy Military Hospital for the French army.

Harry gives me a look of solidarity tinged with helplessness.

"I have to admit that I still find it hard to process all these horrors," he says. "I acquiesce."

"What will become of this soldier without his right leg and his right hand?"

"He'll be a different man from now on. His life will never be the same. Once back in his country, he'll undergo more sophisticated surgery in order to get him ready for prostheses. Then he'll get reeducation."

"Where is the center for reeducation for military personnel?" I ask.

"Headley Court is in the outskirts of London. Wounded handicapped patients get great care there. Our rehabilitation programs are very proactive. The quality of the prostheses are constantly improving. As you know, these days you can do competitive sports with minus one, or even two legs."

"And is there a limit to follow-up care? Do they receive benefits?"

"For three years, then everything stops. They continue to receive a pension, but they're removed from the Army. At least they receive a lump sum to help them get set up. That's the least that can be done! Strangely enough, their ability to pull through isn't necessarily linked to the severity of their handicap. As always, some will manage better than others, but the majority will remain deeply affected. A loving family can help a lot."

"And if they don't have…"

"It can become an ordeal that takes them to hell."

"Why save everyone at all costs?"

"It's an ethical question."

"Aren't there also political reasons?"

"What do you mean, Elie?"

"Public opinion and the European media are globally against the war, so it's better to avoid casualties. As for the wounded, well, we can talk about them later …"

I feel Harry stiffen. I understand that as a soldier for the Queen, he must maintain a certain discretion, so I don't insist.

He answers as best he can: "Afghan children who get wounded by mines have an even crueler destiny, Elie! Often the mines explode in their hands when they're playing with them. If they survive, these mutilated kids have a tragic future, because their society rejects the handicapped. They've become useless to their families and society. They'll end up beggars."

Once the rescue operation has been completed, the drama is over, and everyone goes back to join his respective service until the next polytraumatized soldier arrives, which will happen before the day is done. For it's on a daily basis that numbers of soldiers are transported to Camp Bastion. A continuous flow of seriously wounded troops, with legs, arms, and sometimes testicles, ripped off. There are simple, double, even triple amputations. On average, four a day, not counting other emergencies. It's a full time job. I don't know if I'll ever be able to erase from memory the images of these inanimate bodies, covered with blood and deformed by explosions. Real chunks of meat, bad-smelling, with already rotting burns, for the heat of the climate doesn't help. I'll have to learn how to deal with sensations and flashbacks that I guess I'll have for the rest of my life. That's the lot befalling those who have known traumatizing situations.

I often imagine my colleagues, the British physicians in 1914-18, who had to take care of thousands of victims at once. Around sixty thousand the first day of the battle of the Somme, of which almost twenty thousand died. How did they manage? It was impossible to save everyone. Many were dead in the fields. The practice of triage was born at that time.

In Afghanistan, the risk is constant and affects everyone. Outside the camps, at the check-points, in the villages or on the roads, danger lurks in mines and ambushes. On the inside, we are exposed to suicide attacks or mortar fire. Helicopters can be the targets of missiles and rockets.

The goal of the rebels isn't to kill, but to strike the morale of the troops and their families, as well as public opinion in Europe and the United States. When one has few means, as is their case, morale and propaganda are elements of strategy.

In patrolling in the Green Zone, the young British soldiers obey American strategy. Caught in this trap, they get hit by improvised exploding mines, the famous IEDs.

Ironically, these are made with the fertilizers that the United Nations supplies to peasants in order to support the development of the country's agriculture. The way to hell is paved with good intentions. In order to make these mines more harmful, the insurgents

combine the misappropriated substances with bicycle pedals and goat dung, bits and pieces of which turn up in the soldiers' mangled limbs. In a paradox of guerilla warfare, the enemy, who's fighting with bare feet and a Kalashnikov, uses modern technology in the form of the mobile phone to set off the mines. These devices do a lot of damage, both on a physical and psychological level.

In this hostile context, it's important to keep a watchful eye on the soldiers' mental equilibrium in order to locate psychological dysfunctions as early as possible, for the sooner they're taken care of, the better the outcome will be. Everyone at Camp Bastion has received a little booklet that explains the first signs of disturbance. If someone notices a behavioral change in one of his fellow soldiers, he must report it immediately. A psychiatric nurse manages the first symptoms. Trained in behavioral techniques, he uses EMDR. Eye Movement Desensitization and Reprocessing seems to yield good results, as long as it's used soon after the traumatizing incident.

This behavioral treatment, a kind of hypnosis developed at the end of the Eighties by the American psychologist, Francine Shapiro, is implemented by the British Army in its management of post-traumatic stress. These techniques may be helpful in the short term, but the effects of war trauma can manifest for years. Over the long haul, verbalization and analysis seem indispensable.

Freud and the psychoanalysts understood this with World War I. French military psychiatry followed the same path in recently developing the concept of invisible wounds.

Those working in health care don't escape the stress. Ready to attend to seriously wounded soldiers, 24/7, they are, by the very nature of the situation, constantly confronting war and its collateral effects.

Physicians, nurses and stretcher-bearers on the front line must above all do their duty while being all the time aware that their own lives are in danger. This requires not only professional competencies, but also courage, commitment and self-control. Members of the medical staff on the front line are trained like warriors, because they provide a privileged target to the enemy, who knows that wounding or killing one of them will deal a blow to the morale of the troops he is fighting against.

Back in the emergency department, I run into Leslie.

"You're back just in time, Elie," he says. "There's a fair amount of small traumatology waiting for us. A military vehicle got turned over on one of the rotten roads in the area. We have to take care of a dislocated shoulder, a tibia fracture, one in the forearm and two minor cranial injuries. There is also this American soldier who put a bullet in his own thigh while handling his weapon … We'll divide up the work."

As a rule there is a great sense of solidarity between the different medical teams. There is no feeling of hierarchy, the only thing that counts is one's function. The protocols have been well honed.

The unit runs like a huge labyrinthine machine. Seven emergency physicians (including me), four visceral surgeons, four vascular, a trauma surgeon and a plastic surgeon, to which one must add: sixteen anesthesiologists, two resuscitators, two internists, two doctor lab technicians, supported by four lab workers, three general physicians, two dentists, three physical therapists. Then there are the nurses, operating assistants, paramedics, combat medics, auxiliary mental health workers, the nurse in charge of hygiene, the interpreters, the Catholic priest, the Anglican pastor, the athletic coaches, two teams of four MERT, the maintenance, cleaning, medical staff, administration, the RAF and its sanitary airplanes for repatriation and the rest of the logistics team. In this extreme context, all available energy is oriented toward the patients. As health professionals, they are all inured to the trials of human suffering. Humor is also a valuable tool. It's a good remedy against the blues.

In addition to the major wounds of war, the unit takes care of little traumatology and accidents of all kinds. Just like in any European emergency unit, we sew up gashes, apply plaster casts and splints, and treat sprains, sciatica, kidney stones and all kinds of infections.

The presence of a plastic surgeon is specific to the health service of the British army. It's a sound idea. His role is to advise the other surgeons on the way of treating damaged tissues. His knowledge of plastic surgery enables him to foresee how certain scars will evolve, with most of the wounds in this dirty war being amputations that will have to be equipped with prostheses down the line. His experience and long-term vision are essential. With that in mind, on the ground the tourniquets are placed as close as possible to the wounds in order to respect the healthy tissues around it.

Camp Bastion is, in a certain sense, a front line laboratory, a place of experimentation for the future. Americans have invested millions of dollars in neurosciences, nanotechnologies and mechatronics. Artificial limbs linked to the brain by sophisticated, miniaturized digital

systems, true intelligence prostheses, will enable paraplegics and tetraplegics to walk again. And in a more distant future, one can imagine an ability to cultivate, from the original cells, tissues that would enable the reconstruction of muscles, bones, even organs, through the practice of autografting.

In the midst of the afflictions they create, wars have always led to advances in medicine and surgery. That's the positive side of these dramas. The First World War saw experiments in blood transfusion, in surgery to repair broken faces and in neurosurgery. Then, resuscitation and antibiotics came into being during the Second World War

The longer I stay at Camp Bastion, the more I understand the role that the French army has asked me to play here. I'm immersed in a true laboratory of wartime medicine. The experiments that are run here, and of which I'm a privileged witness, will most likely be applied in civilian hospitals in years to come. Perhaps the report I'll make to the army will serve that purpose. In other words, I have come into this hell in the service of humanity. Seen in this light, my mission takes on another meaning and, in the moment, seems more useful to me.

As the Buddhists say, "It's in the mud that the lotus grows."

***Note:*** *This is an excerpt from Mission Afghanistan: An Army Doctor's Memoir, published by SparkPress, 2018.*

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