EXPERIENCES OF WAR SURGERY IN FRANCE AND ERITREA.

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It is difficult to know when one's own experiences are of interest to other people but Colonel McAlpine has almost ordered me to offer my experiences of war surgery to the R.A.M.C. Journal and I think that if I relate certain episodes in France and Eritrea, it will prove to readers of the Journal the least tedious method of complying with the Colonel's wishes.

In March, 1940, I was sent to Metz to serve as surgeon to the C.C.S. which was receiving casualties from British units in front of the Maginot line. At that time this was the only place where there was active fighting and from March to early May the C.C.S. received a constant small stream of men wounded in patrol fights and by odd bombs and shells. This stream was small enough to allow time for a thoughtful examination of the wounded, for unhurried operating and for retaining the patients in the C.C.S. for from ten to fourteen days.

The Metz unit was rather a hybrid, resembling most closely the light section of a C.C.S. Our official title was "C.C.S., W Force," and we finally consisted of five officers, six sisters and forty-three other ranks. We were housed in a wing of a French military hospital which was already completely equipped and, Metz being only twenty miles behind the front line, the wounded took from four to twelve hours to reach us. The conditions for securing primary suture of wounds were ideal and we carried out this procedure, after careful excision, in about twenty-five cases. Two became so infected that all stitches had to be removed and one or two others needed the removal of one stitch but, on the whole, we were pleased with the results.

Life at Metz was very pleasant. The town and surrounding country, which we explored on bicycles, were lovely in the spring weather. The Moselle river and its wines were a delight, our mess had the services of a widow woman who cooked exquisite meals and we saw interesting aspects of the fighting at a safe distance. But this halcyon existence was rudely shattered when the Germans made an expensive and unsuccessful attack in the Metz sector on May 12 and 13. The C.C.S. was almost overwhelmed with work for in three days we took in ninety wounded and did fifty operations. No sooner was the operation list nearly finished than more ambulances would arrive. I found that sixteen hours operating on end was as much as I could do when starting fresh and I averaged rather more than one operation an hour.

It was fortunate that the rush of admissions lasted only three days since after two sixteen hour sessions with a ten hour rest between I felt dead beat for two days. Our resources were strained in other ways also for the French turned off the gas during air raids so often that we could only do wet sterilizing and we finished up by operating in a macintosh apron and a pair
of gloves which were merely scrubbed between cases. Sterile towels were economized by using a single towel with a hole cut in the centre in place of four.

We had foreseen some such rush as took place and had planned for it, as far as our accommodation would allow. Our method of working was to admit cases at once to the ward. They were then seen as soon as possible to decide on the necessity or otherwise of operation and brief notes were made, especially of the time of injury, of the type of missile and, in limb injuries, of the integrity of the peripheral nerves. All these are points which cannot be checked after the anaesthetic has started. The operation cases were given morphia and atropine and were then screened in the X-ray room if treatment was not urgent. The screening was often done by a general duties officer and, where foreign bodies were found, our method was to mark the skin in ordinary ink making a, m in the antero-posterior position and an L in the lateral position. These marks were preserved by scratching them with a needle before preparing the skin. This method proved quicker and more reliable than taking plates, as we did not require the finer details of fractures. The screening completed, the cases were lined up outside the theatre in their order of urgency and we worked through them.

Just before the beginning of the rush I decided that a local packing of the wounds with sulphanilamide powder, of which I had read, might be of benefit to our cases. The results astonished us by their excellence and twenty or thirty cases were done thus. This treatment was then in its early stages but what is now a commonplace came to us as a revelation at that time for the wounds were worse and, perforce, more hurriedly dealt with than anything we had previously seen. Unfortunately the stress of the times deprived us of a properly controlled investigation of results.

Our anaesthesia, particularly with continuous pentothal, was a constant source of wonder to our French colleagues who relied on orderlies to render their patients unconscious. The apparatus with which the orderlies effected this was a primitive Clover inhaler capable, it seemed, of producing deep anaesthesia only after the operation had been in progress for some time.

Before I take leave of Metz, I would like to relate two professional anecdotes, one grave, the other gay. The first concerns a man wounded in the chest by shrapnel. He was admitted eight hours after being hit and was seen to have an open pneumothorax. X-ray showed a piece of metal deep in the chest. I operated, intending to close the chest only, but as I was preparing to do this a piece of omentum prolapsed. I opened the chest widely and found a tangential wound of the diaphragm through which the omentum was escaping. After reducing the latter, I repaired the diaphragm and put into the chest a Curvlite retractor. A small black mass was seen on the pericardium and, in trying to pick this off, I drew out of the heart a piece of metal about an inch long after which I closed the chest. The man died suddenly six days later after doing well. A post-mortem showed advanced pericarditis but his pleura was in good shape. I wished afterwards that I had excised a piece of the pericardium and put in sulphanilamide powder. The other story is about blood transfusion; a measure we used very little and for which we were compelled, with our small staff, to rely on the French.
We had a very exsanguinated patient whose leg I had just amputated for a severe fracture involving the popliteal artery. We therefore called in our French colleagues who arrived with a donor and a very neat little pumping machine for giving direct transfusions. Recipient and donor veins were duly connected up and an excitable French M.O. began turning the handle of the pump, explaining meanwhile how simple it all was. This simplicity soon became obvious, for the patient received 250 c.c. of blood in one minute. He then sat up, having so far been comatose, and called the Almighty and his mother to witness that he could not breathe. We sensed that the right heart might be somewhat overloaded and we pointed to a dial on the pump for counting the revolutions of the handle and asked the Frenchman to explain its purpose. He ceased to twirl the handle and explained, the patient sinking back into coma. We then felt the pulse and expressed ourselves as well satisfied with the results of the transfusion. The machine was disconnected and, to cut a long story short, our patient was married two months later in England.

Towards the end of May it became clear that the Maginot line was being outflanked. Our troops were withdrawn to the Somme and we were recalled to Le Mans. A day or two afterwards I was posted to Rouen. I arrived there on the evening of June 5, 1940, and was operating an hour later. The General Hospital to which I was attached had just opened and was being inundated with about twelve hundred casualties a day. The four surgical teams available worked continuously in eight-hour shifts, two on, two off, during the whole time I was in Rouen. We knew that only a fraction of those needing operation could receive attention and we had to leave the really bad wounds, as being too time consuming, in order to give the greatest number of men the best chance. Our eight hours off duty seemed all too short since sleep was curtailed by the need for meals and by having to leave our tents during the heavier air raids. This five-day nightmare was ended by the arrival of the Germans on the further side of the Seine, and the Hospital had to pack what it could and go. I had the doubtful honour of being a member of the rear party and was suturing a stomach when the Seine bridges were blown up. I closed the abdomen wearing an unboiled tin hat and our patient, heavily morphinized, was loaded on to an ambulance when two hours later at dawn the rear party left.

Our drive back was dramatic and rather terrible. We reached a Base Hospital on the west coast of France near St. Nazaire but orders to evacuate this soon arrived. We departed in an ambulance train commanded by a Middlesex man, Eric Sibley, our enjoyment of the journey being marred by the fact that nobody knew whether the line had been cut by German tanks, and our driver kept stopping to confer with signalmen. We finally reached the Brittany village of Quiberon and it was with relief that we saw a hospital ship steam into the bay to embark the wounded and ourselves for England.

It is a far cry from France to Eritrea but I will skip the steps intervening up to the moment when in January, 1941, I left Cairo station as surgeon to a mobile team bound for Kassala. The first part of the journey was interesting and comfortable but its latter end reached a climax of dawdling discomfort of which my chief memories are dust, sweat and flies.
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The team was composed of an anaesthetist, myself and two theatre orderlies, together with operating equipment. We found the 2nd Indian C.C.S., to which we were ordered to report, encamped beside the railway round a nucleus of two bungalows and we were given the British section, dealing with officers and European troops, to look after. The nursing personnel for our section was provided by the arrival of a staging section commanded by a Middlesex man, Captain John Gordon. The front line was some two hundred miles in advance by the time we reached Kassala and the troops were about to make their first attack on Cheren. The wounded were evacuated to us by motor ambulance or lorry over appalling roads and the wounds we had to treat were often days old. Moreover we had to evacuate every case without delay to the base hospitals by ambulance train. Here we had a very different problem from that at Metz, for the surgery necessary to make a wounded man as safe and as comfortable as possible for travelling at the earliest possible moment differs from the treatment which one would carry out at the Base. In brief it consists of doing the minimum of operating compatible with good drainage and good fixation. We had no X-ray plant available but this was, surprisingly enough, no great disadvantage for the type of surgery we were called on to do. One often felt a foreign body as soon as one introduced a gloved finger into a wound which clearly needed further incision.

Kassala is the most fantastically frightful spot. There is a special variety of dust storm distinguished by the extreme fineness of the dust. The town, a grubby affair with one decent shop which carries on business under the picturesque title of The Abyssinian Trading Co., is about a mile from the railway. The inhabitants however are quite intriguing and among a motley one could pick out Eritreans, who are black skinny people with high cheek bones and thin lips, and Fuzzy-Wuzzies who are big men with a great shock of curly hair. They have an amusing way of carrying their iron rations when off in the bush: they smear their hair with mutton fat, rub in flour and suck their locks if they get hungry, a custom which does not add to their personal freshness. They struck us as being the real darkest Africa touch, with their spears, their ornaments stuck through their noses and their tattooing. The surrounding country is flat dry scrub to the east and to the west the Eritrean hills start with a huge granite boulder, a thousand feet high and bare as an egg, which looks as though it had been carelessly dropped by some giant. We experienced heat up to 110° most afternoons and were plagued by a variety of enormous and terrifying insects. There was no electricity and no fans but we were blessed with a piped water supply from the station tanks. The remains of the Italian rout were everywhere visible in primitive earthworks, observation posts and empty Chianti bottles. Kassala was the only place of importance captured by the Italians and their front line was never far from it. We were told that the native schoolmaster of Kassala, an employee of the Crown, used to pass through the Italian lines every Saturday morning, make for the nearest representative of the Sudan government, draw his weekly salary and return home.

The first attack on Cheren failed and, while our troops were being rested and reinforced, the C.C.S. had a quiet time. A railway was meanwhile being built
into Eritrea to a place called Tessenei, a few miles inside the Sudan-Eritrean border. This work was finished about seven weeks after our arrival in Kassala and, when railhead was shifted to Tessenei, we were glad to be shifted with it for Kassala was dreadful when one had plenty of time to think about it. At Tessenei we were attached to No. 11 Indian General Hospital. The hospital was mostly tented but had a small Italian civil hospital for the worst cases. The team again took over the surgery for casualties among English personnel. The surrounding country was a slight improvement on Kassala in that there was thicker scrub and more hills, but the place was an oven. Its speciality was “dust devils,” whirling columns of dust perhaps a hundred feet high and twenty feet in diameter which moved across the plain like a water-spout at sea. A specimen passed through our tent one day while Major Grierson, our anaesthetist, was lying in bed. He was nearly choked and it was difficult to distinguish his features from the surrounding pillow, so covered in dust were both.

We arrived in Tessenei during the second and successful attack on Cheren and we worked hard for the first few days. It was surprising how slight most of the wounds were. Perhaps the majority were caused by the tiny Italian hand-grenade of which one man could carry a couple of dozen in his pockets: these missiles burst into a shower of aluminium fragments which spattered the skin but failed to penetrate deeply. They caused peppered wounds, painful and disabling at the time but often completely healed two days after the scab had separated. To the underside of the scab the metal fragment was usually adherent.

Various incidents kept us amused at Tessenei. One day the Indian orderlies’ rations, which consisted of two live goats, were eaten by a wild beast reported to be a lion. Lions had not been seen in the neighbourhood for fourteen years but our big game shots procured further goats the next night and ensconced themselves nearby in lorries. When the goats were heard to utter cries, the headlamps of the lorries were switched on and a small hyena, terrified by a fusillade of rifle fire, fled unscathed into the night. On another occasion our tent was invaded one night by a gigantic spider which Grierson, an agile man, trapped under a six inch enamel bowl. It was too big to fit under this and its two hind legs were amputated by the bowl’s rim at mid-thigh. Grierson, true to his calling, finished it with a Flit gun and the autopsy showed a body two inches long and about five pairs of legs, each five inches long when stretched out. We tucked our mosquito nets round us with particular care that night though these spiders, far from hurting men, attack and eat scorpions; they get an ample diet in Tessenei. Yet another bizarre experience occurred after a small explosion at the station in which some local Eritrean labourers were seriously wounded. One of them, who had a piece of metal in his liver, subsequently died. I wished to do a post-mortem but, on arriving at the mortuary tent, I found that the family was laying out the body. They stood aside however and clearly expected me to continue with whatever I had come to do. In the presence of this interested audience I did a limited post-mortem and recovered, amid murmurs of approbation, a piece of metal from the centre of the right lobe of the liver; my orderly had thoughtfully told me that I must work with a scalpel while he unobtrusively held on to the...
larger knife we had brought in order to protect my back if I unwittingly committed a sacrilege. The family were a coal black, wild-looking lot. However, I handed the fatal missile to the senior member present and he received it with indications of gratitude for my assistance. I then sewed up, using what I hoped was an impressive surgical technique, and was ushered from the tent with every sign of goodwill. I hope this is the last time that I perform an autopsy with the relatives in attendance.

By the middle of April our troops were well into Abyssinia and the hospital at Tessenei was so slack that Grierson and I had a few days’ leave. We arranged with some officers in the Cape Corps motor transport to board one of their lorries bound for Cheren and Asmara. The first day’s journey was to Agordat over very rough roads. Next day the going improved as we neared Cheren and, when we finally wound up the Cheren gorge which our troops had so recently taken, we were astonished at their feat. The road from Cheren to Asmara ascends in mountainous country and one could not help feeling that a stubborn Italian resistance and a little more scorched earth policy in the shape of road demolition must have held up our troops almost indefinitely. As it was, only three road blocks were encountered which the magnificent work of the Indian sappers had soon cleared. Asmara itself is a pleasant town nearly 8,000 feet above sea-level and the contrast in temperature with the plains was delightful. The town had had one stick of bombs dropped across it and the damage was negligible but the aerodrome was a sight to rejoice any British heart, littered as it was with burnt-out Italian planes and the remains of fire-blackened hangars. We did the return journey of about 250 miles to Tessenei in a Cape Corps staff car and we again paused at the Cherengorge to inspect Fort Dologorodoc. So powdered were its defences by gunfire that it was difficult in places to make out the ramparts. One had a wonderful view of Mount Semchal on the opposite side of the gorge and of the plain at our feet, along which our troops had had to advance. The road, and its approaches for miles, were completely commanded by these two positions in both of which the Italians were strongly entrenched. The storming of the Fort will, I imagine, rank as an epic in the history of war. The deed filled us with wonder as we stood on the site of its achievement.

We were not long to endure the heat and dust of Tessenei after our return from Asmara. Orders came for our return to Cairo and we retraced our steps via Khartoum (temperature 116°F under the hotel fans) and the Nile.

I feel that this slice of reminiscences is somewhat unsuitable to my age but I hope that my attempt to put across the “old campaigner” stuff will cause amusement in one way or another.