THE TACTICAL EMPLOYMENT OF THE MEDICAL SERVICES IN A CAVALRY CORPS.

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Among a number of interesting and authoritative articles that have appeared since the Great War on the methods of dealing with wounded in the field, the writer has seen none that has considered the problem from the point of view of the regimental medical establishments and field ambulances operating with cavalry. It is thought, therefore, that a description of what was done in this regard in the Desert Mounted Corps, the largest cavalry force employed in the recent war, may be of interest to readers of the Journal of the Royal Army Medical Corps; especially since the present war establishments and equipment, together with the instructions for tactical use of cavalry field ambulances laid down in the new Royal Army Medical Corps Training, differ materially from those to be described.

So that any views expressed may not be thought individual to the writer, it may be mentioned that this article has been submitted to Colonels D. G. Croll, G. P. Dixon and R. Fowler, of the Australian Army Medical Corps, and Lieutenant-Colonel C. E. Hercus of the New Zealand Medical Corps, who held the positions of Assistant Directors of Medical Services with Mounted Divisions in the Desert Mounted Corps; and they have expressed general agreement with my views. It is thought too that they do not conflict with the opinions of Colonels A. J. McNab, L.M.S., and W. Richardson, A.M.S., and Lieutenant-Colonel A. W. Moore, R.A.M.C. (T.), who held similar appointments in the Corps.

A brief résumé of the history of the Desert Mounted Corps may be given. It had its origin in the Anzac Mounted Division, consisting of three Australian Light Horse and one New Zealand Mounted Rifle Brigade, together with the 5th Mounted (Yeomanry) Brigade, which comprised the mounted troops of the northern section of the Suez Canal defences in 1916. The greatest part of the campaign in the heavy sand of the Sinai desert was carried out by these troops. Early in 1917 a second division, the Imperial Mounted Division, was formed from two Yeomanry and one Australian brigades, shortly afterwards renamed the Australian Mounted Division when a second Australian brigade replaced one of the Yeomanry brigades. These two divisions took part in the two unsuccessful attacks on Gaza. A third division was formed in the middle of 1917, the Yeomanry Mounted Division, whereupon the new formation, the Desert Mounted Corps was created. It took a prominent part in the capture of Beersheba, the advance up the Plain of Philistia and the capture of Jaffa, Jerusalem and Jericho. Towards the middle of 1918 reorganization took place in
consequence of the arrival from France of the Indian Cavalry and the withdrawal of a portion of the white troops for service in France.

The constitution of the Desert Mounted Corps was then as follows:

**ANZAC Mounted Division.**
- 1st Australian Light Horse Brigade.
- 2nd Australian Light Horse Brigade.
- New Zealand Mounted Rifle Brigade.

**4th Cavalry Division.**
- 10th Cavalry Brigade.
- 11th Cavalry Brigade.
- 12th Cavalry Brigade.

**Australian Mounted Division.**
- 3rd Australian Light Horse Brigade.
- 4th Australian Light Horse Brigade.
- 5th Australian Light Horse Brigade. (Included a regiment of French Cavalry.)

**5th Cavalry Division.**
- 13th Cavalry Brigade.
- 14th Cavalry Brigade.
- 15th Cavalry Brigade.

Each Cavalry Brigade with the exception of the 15th comprised one Yeomanry and two Indian Cavalry Regiments; the 15th Cavalry Brigade was formed by three Imperial Service Cavalry Regiments (Indian).

The medical units consisted of five Australian Light Horse Field Ambulances, one New Zealand Mounted Field Ambulance, five Combined Cavalry Field Ambulances, one Indian Cavalry Field Ambulance and a composite French medical detachment; also a sanitary section to each division. In addition there were two improvised operating units, one bacteriological and hygiene field laboratory, and two malarial diagnosis units. These units took part in the operations in the Jordan Valley and the final offensive that resulted in the capture of Damascus, Aleppo, the remainder of Palestine and all Syria up to the border of Asia Minor. They had experience of evacuation of sick and wounded in the desert, in deep mud, in steep and rocky mountains unfit for wheeled transport; of long pursuits in more or less roadless country; of infantry attacks on prepared enemy positions and of intense malaria culminating in a tremendous epidemic (mostly malignant) with concomitant influenza.

The regimental medical establishments and field ambulances entered on the Sinai campaign far from perfectly equipped for the conditions under which they were to work. Numerous changes in equipment and organization were made during the three years of the campaign, but though there is much of interest in the means adopted to deal with the problems of evacuation in the desert, it is the organization at the end of the campaign that is most worthy of consideration.

In each regiment there were twelve stretcher bearers, four per squadron, two orderlies and three medical corps water duty men (withdrawn from all but Australian and New Zealand regiments towards the end of the campaign). Originally three Army pattern stretchers per regiment were provided, carried in a single Maltese cart, or on a camel where the sand rendered wheeled transport impracticable. But as a regiment frequently occupied a frontage up to three miles, the delay in transporting the stretchers to wounded who might be at the extremities of the regimental front rendered this arrangement impracticable. It was therefore necessary that the stretcher bearers of each squadron should carry their stretcher
Scheme of Evacuation in the Desert Mounted Corps.
with them. The regulation stretchers being too large and heavy to be carried on horseback, light portable stretchers were evolved, one carried by a stretcher bearer in each squadron. Such a stretcher, weighing only about nine pounds, consisted of two bamboo poles, which, with light traverse bars were carried rolled in the canvas bed into which the poles were slipped when prepared for use; the roll thus formed was strapped round with the slings, and carried in a leather bucket attached to the stretcher bearer’s off-side stirrup iron and slung by a strap from his elbow. On these wounded were carried back to collecting posts formed in each squadron, under cover, perhaps 200 yards from the firing line, and at about the same parallel as the “led horses.” Each collecting post was formed by one of the water duty men or medical orderly, who were trained in first aid as well as possible. The regimental medical officer with his orderly formed a regimental aid post in the vicinity of regimental headquarters, perhaps 800 yards in rear of the firing line. Wounded that required particular attention were brought to him by the regimental stretcher bearers, or on occasions he would go to the collecting posts; many of the wounded did not come under his care.

Though the textbook teaching visualized the field ambulance as carrying out most of the collection of wounded after the action was over, this was not the method usually adopted. Instead, wounded were collected as soon as possible, and while as many as could be were sent back on their horses or walked, the main object was to bring up the ambulance transport as far forward as possible to the collecting posts or even the firing line whenever there was sufficient cover. This could be more readily done with the two wheeled sandcarts or the sand sledges used during the desert campaign; the latter proved to be the most comfortable and efficient form of transport for seriously wounded in country in which they were suitable, statements since published to the contrary notwithstanding. Light ambulance wagons being larger and less handy could not be taken so far forward nor could they negotiate so well much of the rough and hilly country encountered, and for these reasons sandcarts, after their broad sand tyres had been removed, were never entirely discarded. It was only on certain occasions that the ambulance bearers were much employed in carrying wounded from the regimental area to the ambulance wagons. Their chief duty was to maintain communication between the ambulance and the R.M.O.’s and, acting as mounted wagon orderlies, to accompany the loaded ambulance wagons. In the first action of importance, the Battle of Romani, the transcendent importance of communication was at once patent. In this action information as to the location of casualties came to ambulances through the brigade headquarters to which they were attached; this method resulted in much confusion. After this a definite liaison between R.M.O. and ambulance was established by means of ambulance bearers, an arrangement that was highly satisfactory and most essential. As a result, instances of wounded remaining uncollected or of
unnecessary calls on the ambulance became rare. At a later date the
difficulties of the ambulances in communication resulted in the issue of
heliographs and signal lamps; the operators, who became remarkably
efficient, were provided from the ambulance personnel. It is to be noted
that the bearers were mounted, and supplied with portable stretchers
similar to those carried by the regimental stretcher bearers. At the
beginning of the campaign the bearers of only the Light Horse Field
Ambulances were mounted, but each new ambulance on arrival in the force
was provided with horses or mules, as without some such means of trans­
port they could not accompany their units. There was a drawback in this
sudden provision of horses, for many of the bearers naturally could not ride.
The number of mounted bearers, thirty-six, reduced in 1917 to twenty-four,
appears to have been greater than was necessary. Could some of them
have been carried in motor vehicles so that they were not burdened with
the care of their horses when hard put to it in dealing with a rush of
emergencies, it would have been a gain. However, the country traversed in
following the cavalry would rarely permit of this, as must so often be the
case in cavalry operations in many countries. The necessity for some
mounted bearers nevertheless can hardly be disputed, and it would appear
that a cavalry field ambulance without a portion of its personnel mounted
will often be found seriously wanting.

The mode of collecting wounded just described does not of course apply
to a charge or pursuit. In such cases the R.M.O. and his assistants at the
rear of a regiment gave attention to the wounded as they fell and left
them alone or in charge of stretcher bearers to await the ambulance
wagons. In the case of a retirement, of which experience fortunately was
limited, as many wounded as possible were packed into the ambulance
transport, in some cases up to 12 in a sandcart constructed for two; any
in excess could only be left.

The next stage in evacuation was the advanced dressing station. The
general principle was to site this as far forward as circumstances would
permit, in some cases within a few hundred yards of the firing line, but
rarely more than a mile to the rear. Its personnel consisted of one of the
two tent subdivisions of the ambulance with a few tents and the essentials
only of medical equipment extracted from panniers and fracture boxes,
together with a good supply of medical comforts, water and firewood.
This tent subdivision, mounted on camels or donkeys, together with the
bearers, transport for wounded, and wagons, camels or pack horses for
equipment, formed what was termed the mobile section of the ambulance,
and accompanied its brigade at all times. The remainder of the ambulance,
consisting of the second tent sub-division, wagon orderlies and dismounted
transport details with camels or general service wagons for equipment, was
called the immobile section, being unable to move any faster or to a greater
distance than its personnel could march on foot. Such a division of a
cavalry field ambulance into mobile and immobile sections is essentially
similar to the present organization into headquarters and company. It was the custom to amalgamate the three (sometimes two only) immobile sections of each division into one somewhat ill-balanced unit designated a divisional receiving station. This unit was the keystone on which the whole system of evacuation was based in the larger operations. While corresponding to a main dressing station it, perforce, on many occasions took on some of the functions of a casualty clearing station. In general it was administered during an offensive as a Corps unit, the A.D.M.S. usually being too far ahead and out of touch with it to do so himself. Wounded were brought to it by the divisional motor ambulances or cadrolet camels. In the two great advances the receiving stations were used in leap-frog fashion, the foremost when filled with patients being passed by those from the rear which had already evacuated theirs. The distance of a divisional receiving station from the nearest advanced dressing station commonly varied from five to thirty miles, though when the 5th Cavalry Division reached Aleppo the nearest was 120 miles behind it; this, however, was largely due to delay in the forward movement of medical units by overwhelming sickness which broke out in Damascus.

The means of evacuation from immobile sections or divisional receiving stations varied according to circumstances. In the desert it was by sand-carts and camel convoys of unemployed field ambulances of infantry divisions. For a brief period at the time and after the capture of Beersheba a portion of a motor ambulance convoy was available, but as a rule there being only one motor ambulance convoy for a force finally comprising eleven divisions, little could be spared for the Cavalry Corps usually far in advance of the infantry. Reliance had to be placed on returning empty supply and ammunition motor lorries which in most cases handed over the sick and wounded to field ambulances of infantry divisions, casualty clearing stations, except in stationary periods, being usually considerably further to the rear. When it is mentioned that formations of the Cavalry Corps in some cases were as much as 50, 60 and even 190 miles from the nearest casualty clearing station, with the methods of evacuation mentioned it will be realized how much devolved on the divisional receiving stations. In an extreme instance, in Damascus, a divisional receiving station with a strength of three medical officers and thirty-five other ranks, mostly Indians, had under its care over 800 sick, practically all of whom were seriously ill, and this, too, in and around a small house with no more than the usual field equipment and with a shortage of food and drinks suitable for invalids.

Though fine feats of marching were carried out by some of the receiving stations, the lack of transport was a great drawback. In the advance up the plain of Philistia after the fall of Beersheba and Gaza, the mobile sections of the ambulances were so far ahead of the divisional receiving stations, and so encumbered with wounded they could not evacuate, that the whole of the motor ambulance convoy cars had to be taken away from
their normal function and used to transport forward one of the divisional receiving stations in order to prevent a complete breakdown of the whole plan of evacuation. Even this would not have sufficed had it not been for help in evacuating other collections of wounded given by the divisional ambulances of the 20th Corps.

To one of the divisional receiving stations was attached the operating unit (formed essentially to provide early operative facilities for abdominal wounds) for the Gaza—Jerusalem advance. This unit was provided with a motor operating car and a general service wagon supplied from Corps headquarters; it was therefore more mobile than the divisional receiving station, so that when its work was finished with one receiving station it moved on to join up with the divisional receiving station that was furthest ahead. It proved itself of the greatest value. For the final offensive two other operating teams were added, but without any motor vehicles. Also to the divisional receiving stations the malaria diagnosis units were attached in the latter part of 1918. These units, of which there were two to the Corps, were miniature field laboratories and were invaluable. As events turned out it would have been better if one had been attached to a mobile unit and so available earlier in Damascus, where malaria with choleraic symptoms was being mistaken for cholera. The field laboratory, though unprovided with transport and so more or less stationary, carried out an immensity of work and was of the greatest value.

Before concluding, some features of sanitation may be recalled. It is noteworthy that in each sanitary section, which functioned with its division and never as an area unit, twelve of the rank and file were mounted; until this was done the distance apart of brigades in bivouac made sanitary inspection impossible, while as soon as the division moved on, it lost the use of its sanitary section. It was also found essential for the sanitary section to carry out a great deal of constructional work.

The most important sanitary feature, however, was the provision of portable sanitary equipment. Prior to this sanitation was inevitably bad after a forward move until sanitary stores could be brought up. When each regiment came to carry in a half limber sufficient sanitary appliances and disinfectants for its use the position was greatly improved, there was no wait for slowly arriving equipment and faecal incineration—which was the rule—could be embarked on at once.